GW - 004

2013 AGWMR

VOL 3 OF 5

03 / 11 / 2014

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330785 Page 2 of 2

Company-City ORA - Midland **Phone** 432-686-0086

Lab Only: 463050

Project Name-Location NEwice ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) Mike Wisniowieck

E-mail Results to ☒ PM and **Fax No:** 432-686-0186

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nitan **Signature**

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals 6010B	TPH Sm 2540C	Chlorides E300	TPH GRO+DRO 8015 mod	Hex Chrom 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW18 051313	5-13-13	1510		W		X	7													X	X	X	X	X	X											1
2	MW18A 051313	↓	1610		↓		↓	↓													↓	↓	↓	↓	↓	↓											2
3	MW24A 051313	↓	1740		↓		↓	↓													↓	↓	↓	↓	↓	↓											3
4	Trip Blank	↓			↓		↓	2													↓																4
5																																					5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) [signature]	5-13-13 1840	2) SHOICHI KOCHIMA	5/13/13 18:32
3)		4)	
5)		6)	

Total Containers per COC: 9 Cooler Temp: 1.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

Committed to Excellence in Service and Quality *www.xenco.com*

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/14/2013 10:00:00 AM

Work Order #: 463050

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Alejandro Montoya Date: 05/14/2013

Checklist reviewed by: Alejandro Montoya Date: 05/14/2013

Analytical Report 463148

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

28-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

28-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463148**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463148. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463148 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW62A 051413	W	05-14-13 09:30		463148-001
IW26 051413	W	05-14-13 15:10		463148-002
MW69 051413	W	05-14-13 11:15		463148-003
IW24 051413	W	05-14-13 13:40		463148-004
IW25 051413	W	05-14-13 14:25		463148-005
IMW90SA 051413	W	05-14-13 16:20		463148-006
IW27 051413	W	05-14-13 18:00		463148-007
MW24 051413	W	05-14-13 10:05		463148-008
MW70 051413	W	05-14-13 10:55		463148-009
MW70A 051413	W	05-14-13 13:20		463148-010
MW58 051413	W	05-14-13 14:55		463148-011
MW30 051413	W	05-14-13 15:55		463148-012
MW29 051413	W	05-14-13 17:20		463148-013
MW31 051413	W	05-14-13 18:25		463148-014
TRIP BLANK	W	05-14-13 00:00		463148-015

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*28-MAY-13*
Work Order Number(s):	*463148*	Date Received:	*05/15/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-913686 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 913686, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463148-002, -001.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Batch: LBA-914282 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914282, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463148-013, -014.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*28-MAY-13*
Work Order Number(s):	*463148*	Date Received:	*05/15/2013*

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW62A 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-001** Date Collected: 05.14.13 09.30 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**60.4**	5.00	0.140	mg/L	05.17.13 08:15		5

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**502**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0227**	0.0200	0.00756	mg/L	05.24.13 03:39		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 03:39	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 03:39	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 03:39	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 913686 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW62A 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-001**	Date Collected: 05.14.13 09.30	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 19:28	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 19:28	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 19:28	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 19:28	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	125	70 - 135	%		
o-Terphenyl	129	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 11.00	Tech:	DYV
Seq Number:	914153	Prep seq:	638381		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 18:30	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 18:30	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 18:30	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 18:30	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 18:30	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 18:30	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 18:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	87	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **IW26 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-002** Date Collected: 05.14.13 15.10 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**484**	10.0	0.280	mg/L	05.17.13 08:36		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1730**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:02	U	1
Chromium	7440-47-3	**0.00527**	0.0100	0.00355	mg/L	05.24.13 04:02	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:02	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:02	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 913686 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**IW26 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-002**	Date Collected: 05.14.13 15.10	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 10:51	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 10:51	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 10:51	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 10:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	115	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 11.00	Tech:	DYV
Seq Number:	914153	Prep seq:	638381		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 18:46	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 18:46	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 18:46	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 18:46	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 18:46	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 18:46	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 18:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	86	80 - 120	%		
4-Bromofluorobenzene	85	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW69 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-003** Date Collected: 05.14.13 11.15 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**877**	20.0	0.560	mg/L	05.17.13 08:58		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2190**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:08	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 04:08	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:08	U	1
Manganese	7439-96-5	**0.539**	0.0200	0.00291	mg/L	05.24.13 04:08		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW69 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-003**	Date Collected: 05.14.13 11.15	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 10:32	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 10:32	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 10:32	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 10:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 21:13	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 21:13	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 21:13	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 21:13	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 21:13	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 21:13	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 21:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	114	80 - 120	%		
4-Bromofluorobenzene	116	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **IW24 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-004** Date Collected: 05.14.13 13.40 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**443**	20.0	0.560	mg/L	05.17.13 09:20		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2230**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:14	U	1
Chromium	7440-47-3	**0.0723**	0.0100	0.00355	mg/L	05.24.13 04:14		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:14	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:14	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0651**	0.0100	0.00500	mg/L	05.15.13 08:50		1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**IW24 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-004**	Date Collected: 05.14.13 13.40	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 11:45	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 11:45	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 11:45	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 11:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	117	70 - 135	%		
o-Terphenyl	124	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 21:29	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 21:29	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 21:29	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 21:29	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 21:29	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 21:29	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 21:29	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	119	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**IW25 051413**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463148-005**	Date Collected: 05.14.13 14.25		Date Received: 05.15.13 09.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.16.13 10.00	Tech:	AMB
Seq Number:	914154	Prep seq:	638382		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**531**	20.0	0.560	mg/L	05.17.13 09:42		20

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	ANS	Date Prep:		Tech:	ANS
Seq Number:	914023	Prep seq:			
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2490**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.23.13 12.00	Tech:	KUG
Seq Number:	914595	Prep seq:	638553		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:32	U	1
Chromium	7440-47-3	**0.0269**	0.0100	0.00355	mg/L	05.24.13 04:32		1
Iron	7439-89-6	**0.993**	0.200	0.0188	mg/L	05.24.13 04:32		1
Manganese	7439-96-5	**0.120**	0.0200	0.00291	mg/L	05.24.13 04:32		1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914281	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**IW25 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-005**	Date Collected: 05.14.13 14.25	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 10:58	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**1.29**	1.50	0.988	mg/L	05.22.13 10:58	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 10:58	U	1
Total TPH	PHC635	**1.29**		0.988	mg/L	05.22.13 10:58	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	126	70 - 135	%		
o-Terphenyl	130	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 21:46	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 21:46	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 21:46	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 21:46	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 21:46	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 21:46	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 21:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	80 - 120	%		
4-Bromofluorobenzene	91	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **IMW90SA 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-006** Date Collected: 05.14.13 16.20 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**166**	10.0	0.280	mg/L	05.17.13 10:47		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1150**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:38	U	1
Chromium	7440-47-3	**0.00542**	0.0100	0.00355	mg/L	05.24.13 04:38	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:38	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:38	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**IMW90SA 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-006**	Date Collected: 05.14.13 16.20	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 11:25	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 11:25	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 11:25	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 11:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	109	70 - 135	%		
o-Terphenyl	119	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:02	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:02	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:02	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:02	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:02	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:02	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	80 - 120	%		
4-Bromofluorobenzene	101	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **IW27 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-007** Date Collected: 05.14.13 18.00 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**98.3**	10.0	0.280	mg/L	05.17.13 11:08		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1030**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:44	U	1
Chromium	7440-47-3	**0.0123**	0.0100	0.00355	mg/L	05.24.13 04:44		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:44	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:44	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**IW27 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-007**	Date Collected: 05.14.13 18.00	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 13:32	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 13:32	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 13:32	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 13:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	109	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:18	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:18	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:18	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:18	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:18	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:18	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	107	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW24 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-008** Date Collected: 05.14.13 10.05 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**674**	20.0	0.560	mg/L	05.17.13 11:30		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1940**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:50	U	1
Chromium	7440-47-3	**0.0633**	0.0100	0.00355	mg/L	05.24.13 04:50		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:50	U	1
Manganese	7439-96-5	**0.00329**	0.0200	0.00291	mg/L	05.24.13 04:50	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0517**	0.0100	0.00500	mg/L	05.15.13 08:50		1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW24 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-008**	Date Collected: 05.14.13 10.05	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 13:59	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 13:59	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 13:59	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 13:59	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	115	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:35	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:35	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:35	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:35	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:35	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:35	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:35	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	95	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW70 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-009** Date Collected: 05.14.13 10.55 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**192**	5.00	0.140	mg/L	05.17.13 11:52		5

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**821**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0208**	0.0200	0.00756	mg/L	05.24.13 04:56		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 04:56	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:56	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:56	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW70 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-009**	Date Collected: 05.14.13 10.55	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 14:26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 14:26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 14:26	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 14:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	108	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:51	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:51	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:51	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:51	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:51	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:51	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	82	80 - 120	%		
4-Bromofluorobenzene	110	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW70A 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-010** Date Collected: 05.14.13 13.20 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**46.8**	5.00	0.140	mg/L	05.17.13 12:13		5

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**541**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0203**	0.0200	0.00756	mg/L	05.24.13 05:02		1
Chromium	7440-47-3	**0.00406**	0.0100	0.00355	mg/L	05.24.13 05:02	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:02	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:02	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW70A 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-010**	Date Collected: 05.14.13 13.20	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 14:53	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 14:53	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 14:53	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 14:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	105	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 23:07	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 23:07	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 23:07	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 23:07	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 23:07	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 23:07	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 23:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	80 - 120	%		
4-Bromofluorobenzene	112	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW58 051413**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463148-011**	Date Collected: 05.14.13 14.55		Date Received: 05.15.13 09.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.16.13 10.00	Tech:	AMB
Seq Number:	914154	Prep seq:	638382		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**967**	20.0	0.560	mg/L	05.17.13 16:57		20

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	ANS	Date Prep:		Tech:	ANS
Seq Number:	914023	Prep seq:			
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3790**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.23.13 12.00	Tech:	KUG
Seq Number:	914595	Prep seq:	638553		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0111**	0.0200	0.00756	mg/L	05.24.13 05:07	J	1
Chromium	7440-47-3	**2.58**	0.0100	0.00355	mg/L	05.24.13 05:07		1
Iron	7439-89-6	**0.0612**	0.200	0.0188	mg/L	05.24.13 05:07	J	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:07	U	1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914281	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**2.52**	0.100	0.0500	mg/L	05.15.13 08:50		10

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW58 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-011**	Date Collected: 05.14.13 14.55	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 11:52	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 11:52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 11:52	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 11:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	114	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 23:23	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 23:23	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 23:23	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 23:23	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 23:23	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 23:23	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 23:23	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	101	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW30 051413** Matrix: Water Sample Depth:

Lab Sample Id: **463148-012** Date Collected: 05.14.13 15.55 Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**127**	5.00	0.140	mg/L	05.17.13 17:18		5

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**696**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0209**	0.0200	0.00756	mg/L	05.24.13 05:14		1
Chromium	7440-47-3	**0.00363**	0.0100	0.00355	mg/L	05.24.13 05:14	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:14	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:14	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW30 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-012**	Date Collected: 05.14.13 15.55	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 15:47	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 15:47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 15:47	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 15:47	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	108	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 23:56	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 23:56	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 23:56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 23:56	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 23:56	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 23:56	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 23:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	80 - 120	%		
4-Bromofluorobenzene	110	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW29 051413**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463148-013**	Date Collected: 05.14.13 17.20		Date Received: 05.15.13 09.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.16.13 10.00	Tech:	AMB
Seq Number:	914154	Prep seq:	638382		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**141**	5.00	0.140	mg/L	05.17.13 17:40		5

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	ANS	Date Prep:		Tech:	ANS
Seq Number:	914023	Prep seq:			
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**546**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.23.13 12.00	Tech:	KUG
Seq Number:	914595	Prep seq:	638553		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0189**	0.0200	0.00756	mg/L	05.24.13 05:19	J	1
Chromium	7440-47-3	**0.0148**	0.0100	0.00355	mg/L	05.24.13 05:19		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:19	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:19	U	1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914282	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	UX	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW29 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-013**	Date Collected: 05.14.13 17.20	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 12:19	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 12:19	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 12:19	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 12:19	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 00:12	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 00:12	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 00:12	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 00:12	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 00:12	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 00:12	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 00:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	97	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW31 051413**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463148-014**	Date Collected: 05.14.13 18.25		Date Received: 05.15.13 09.45	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.16.13 10.00	Tech:	AMB
Seq Number:	914154	Prep seq:	638382		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**106**	5.00	0.140	mg/L	05.17.13 18:02		5

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	ANS	Date Prep:		Tech:	ANS
Seq Number:	914023	Prep seq:			
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**802**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.23.13 12.00	Tech:	KUG
Seq Number:	914595	Prep seq:	638553		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0122**	0.0200	0.00756	mg/L	05.24.13 05:25	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 05:25	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:25	U	1
Manganese	7439-96-5	**0.438**	0.0200	0.00291	mg/L	05.24.13 05:25		1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914282	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW31 051413**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463148-014**	Date Collected: 05.14.13 18.25	Date Received: 05.15.13 09.45

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 12:46	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 12:46	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 12:46	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 12:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 00:29	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 00:29	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 00:29	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 00:29	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 00:29	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 00:29	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 00:29	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	80 - 120	%		
4-Bromofluorobenzene	85	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **TRIP BLANK** Matrix: Water Sample Depth:

Lab Sample Id: **463148-015** Date Collected: 05.14.13 00.00 Date Received: 05.15.13 09.45

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.20.13 17.00 Tech: DYV

Seq Number: 914155 Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 00:45	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 00:45	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 00:45	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 00:45	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 00:45	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 00:45	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 00:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	80 - 120	%		
4-Bromofluorobenzene	89	80 - 120	%		

Sample Id: **638381-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638381-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.20.13 11.00 Tech: DYV

Seq Number: 914153 Prep seq: 638381

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 13:34	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 13:34	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 13:34	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 13:34	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 13:34	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	80 - 120	%		
4-Bromofluorobenzene	107	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638382-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638382-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.17.13 06:26	U	1

Sample Id: **638383-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638383-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.20.13 17.00 Tech: DYV

Seq Number: 914155 Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 20:08	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 20:08	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 20:08	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	81	80 - 120	%		
4-Bromofluorobenzene	118	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638442-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638442-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** % Moist: Prep Method: 1005

Analyst: DYV Date Prep: 05.20.13 14.00 Tech: DYV

Seq Number: 914402 Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 05:04	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	109	70 - 135	%		

Sample Id: **638553-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638553-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 12.00 Tech: KUG

Seq Number: 914595 Prep seq: 638553

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 11:25	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 11:25	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 11:25	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 11:25	U	1

Sample Id: **913686-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **913686-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 913686 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **914023-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914023-1-BLK** Date Collected: Date Received:

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: ANS Date Prep: Tech: ANS

Seq Number: 914023 Prep seq:

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.20.13 08:43	U	1

Sample Id: **914281-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914281-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914281 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Sample Id: **914282-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914282-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914282 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463148, **Project ID:** 073018

Lab Batch #: 914153 **Sample:** 638381-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 13:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 914153 **Sample:** 638381-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 13:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 914153 **Sample:** 638381-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 13:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 914153 **Sample:** 463050-005 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 16:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 914153 **Sample:** 463050-005 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 16:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463148, **Project ID:** 073018

Lab Batch #: 914155 **Sample:** 638383-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 19:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 08:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463148, **Project ID:** 073018

Lab Batch #: 914402 **Sample:** 463050-012 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 14:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.69	10.0	97	70-135	
o-Terphenyl	3.99	5.00	80	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.4	10.0	104	70-135	
o-Terphenyl	4.19	5.00	84	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	4.09	5.00	82	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 05:04

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	5.44	5.00	109	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Lab Batch #: 913686 **Sample:** 913686-1-BKS **Matrix:** Water
Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0223	89	80-120	

Lab Batch #: 914281 **Sample:** 914281-1-BKS **Matrix:** Water
Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0222	89	80-120	

Lab Batch #: 914282 **Sample:** 914282-1-BKS **Matrix:** Water
Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0239	96	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/20/2013

Lab Batch ID: 914153 **Sample:** 638381-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0952	95	0.100	0.0948	95	0	70-125	25	
Toluene	<0.00100	0.100	0.102	102	0.100	0.0965	97	6	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0998	100	0.100	0.105	105	5	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.200	100	0.200	0.199	100	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0993	99	0.100	0.0974	97	2	71-133	25	

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914155 **Sample:** 638383-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.108	108	0.100	0.113	113	5	70-125	25	
Toluene	<0.00100	0.100	0.118	118	0.100	0.120	120	2	70-125	25	
Ethylbenzene	<0.000700	0.100	0.119	119	0.100	0.119	119	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.238	119	0.200	0.231	116	3	70-131	25	
o-Xylene	<0.000700	0.100	0.118	118	0.100	0.114	114	3	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Analyst: KUG **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/24/2013

Lab Batch ID: 914595 **Sample:** 638553-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.990	99	1.00	0.971	97	2	80-120	20	
Chromium	<0.00355	1.00	1.03	103	1.00	1.02	102	1	80-120	20	
Iron	<0.0188	5.00	4.62	92	5.00	4.51	90	2	80-120	20	
Manganese	<0.00291	1.00	0.904	90	1.00	0.890	89	2	80-120	20	

Analyst: AMB **Date Prepared:** 05/16/2013 **Date Analyzed:** 05/17/2013

Lab Batch ID: 914154 **Sample:** 638382-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.5	102	25.0	25.7	103	1	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Analyst: ANS **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/20/2013

Lab Batch ID: 914023 **Sample:** 914023-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Total dissolved solids	<5.00	1000	1030	103	1000	949	95	8	80-120	30	

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914402 **Sample:** 638442-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	107	107	100	104	104	3	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	112	112	100	109	109	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463148

Lab Batch #: 914154 **Project ID:** 073018

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463058-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	20.9	50.0	72.9	104	80-120	

Lab Batch #: 914154

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463148-010 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	46.8	125	183	109	80-120	

Lab Batch #: 914402

Date Analyzed: 05/22/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

QC- Sample ID: 463050-012 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	99.3	99	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	108	108	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463148 **Project ID:** 073018

Lab Batch ID: 914153 **QC- Sample ID:** 463050-005 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/20/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.109	109	0.100	0.0968	97	12	70-125	25	
Toluene	<0.00100	0.100	0.118	118	0.100	0.0989	99	18	70-125	25	
Ethylbenzene	<0.000700	0.100	0.114	114	0.100	0.103	103	10	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.230	115	0.200	0.194	97	17	70-131	25	
o-Xylene	<0.000700	0.100	0.112	112	0.100	0.0975	98	14	71-133	25	

Lab Batch ID: 914155 **QC- Sample ID:** 463245-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/20/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.102	102	0.100	0.0948	95	7	70-125	25	
Toluene	<0.00100	0.100	0.106	106	0.100	0.107	107	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.109	109	0.100	0.109	109	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.203	102	0.200	0.208	104	2	70-131	25	
o-Xylene	<0.000700	0.100	0.0997	100	0.100	0.0982	98	2	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463148 **Project ID:** 073018

Lab Batch ID: 913686 **QC- Sample ID:** 463112-006 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.242	97	0.200	0.245	123	1	80-120	20	X

Lab Batch ID: 914281 **QC- Sample ID:** 463148-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.239	96	0.200	0.240	120	0	80-120	20	

Lab Batch ID: 914282 **QC- Sample ID:** 463148-013 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.243	97	0.200	0.248	124	2	80-120	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463148 **Project ID:** 073018

Lab Batch ID: 914595 **QC- Sample ID:** 463148-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/24/2013 **Date Prepared:** 05/23/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.0227	1.00	0.893	87	1.00	0.967	94	8	75-125	20	
Chromium	<0.00355	1.00	0.892	89	1.00	0.958	96	7	75-125	20	
Iron	<0.0188	5.00	3.91	78	5.00	4.24	85	8	75-125	20	
Manganese	<0.00291	1.00	0.787	79	1.00	0.846	85	7	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463148

Lab Batch #: 913686 **Project ID:** 073018
Date Analyzed: 05/15/2013 08:50 **Date Prepared:** 05/15/2013 **Analyst:** WRU
QC- Sample ID: 463112-006 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914281
Date Analyzed: 05/15/2013 08:50 **Date Prepared:** 05/15/2013 **Analyst:** WRU
QC- Sample ID: 463148-003 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914282
Date Analyzed: 05/15/2013 08:50 **Date Prepared:** 05/15/2013 **Analyst:** WRU
QC- Sample ID: 463148-013 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914023
Date Analyzed: 05/20/2013 08:43 **Date Prepared:** 05/20/2013 **Analyst:** ANS
QC- Sample ID: 463148-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	502	522	4	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463148

Lab Batch #: 914023 **Project ID:** 073018

Date Analyzed: 05/20/2013 08:43 **Date Prepared:** 05/20/2013 **Analyst:** ANS

QC- Sample ID: 463148-011 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	3790	3910	3	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322887 Page 1 of 2

Company-City CRA - Midland **Phone** 432-686-0086

Lab Only: 463148

Project Name-Location NEwice ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) mike wisniowicki

E-mail Results to ☒ PM and **Fax No:** 432-686-0086

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals method 6010 B	TDS SM 2540C	Chlorides E300	TPH GRO + DRO 8015 modified	Hex chrome 7196A				TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW62A 051413	5-14-13	930		W		X	7													X	X	X	X	X	X											1
2	IW26 051413		1510																																		2
3	MW69 051413		1115																																		3
4	IW24 051413		1340																																		4
5	IW25 051413		1425																																		5
6	MW90SA 051413		1620																																		6
7	IW27 051413		1800																																		7
8	MW24 051413		1005																																		8
9	MW70 051413		1055																																		9
10	MW70A 051413		1320																																		10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1)	5-14-13	2) SHOCPI KOLUMA	5/14/13 1960
3)		4)	
5)		6)	5-15-13 9:45

Total Containers per COC: 7 Cooler Temp: 1.5 °C

Otherwise agreed on writing, Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

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☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322888 Page 2 of 2

Company-City CRA - Midland **Phone** 432-686-0080

Lab Only: 463148

Project Name-Location N. Eunice ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)** Mike Wisnio Witchi

E-mail Results to ☒ PM and **Fax No:** 432-6860180

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature** [signature]

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021B BTEX	Diss metals method 6010B	TDS Sm2540c	Chlorides E300	TPH GRO + DRO 8015 mod	Hex Chrom 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW5805141 3	5-14-13	1455		W		X	7													X	X	X	X	X	X											1
2	MW3005141 3	↓	1555		↓		↓	↓													↓	↓	↓	↓	↓	↓											2
3	MW2905141 3	↓	1720		↓		↓	↓													↓	↓	↓	↓	↓	↓											3
4	MW3105141 3	↓	1825		↓		↓	↓													↓	↓	↓	↓	↓	↓											4
5	Trip Blank	↓			↓		↓	2													X	↓	↓	↓	↓	↓											5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) [signature]	5-14-13	2) STEPHAN KOAKINA	5/14/13 19:[illegible]
3)		4)	
5)		6)	

Total Containers per COC: 9 Cooler Temp: 1.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/15/2013 09:45:00 AM

Work Order #: 463148

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/16/2013

Checklist reviewed by: Kelsey Brooks Date: 05/16/2013

Analytical Report 463148

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

31-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

31-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463148**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463148. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463148 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW62A 051413	W	05-14-13 09:30		463148-001
IW26 051413	W	05-14-13 15:10		463148-002
MW69 051413	W	05-14-13 11:15		463148-003
IW24 051413	W	05-14-13 13:40		463148-004
IW25 051413	W	05-14-13 14:25		463148-005
IMW90SA 051413	W	05-14-13 16:20		463148-006
IW27 051413	W	05-14-13 18:00		463148-007
MW24 051413	W	05-14-13 10:05		463148-008
MW70 051413	W	05-14-13 10:55		463148-009
MW70A 051413	W	05-14-13 13:20		463148-010
MW58 051413	W	05-14-13 14:55		463148-011
MW30 051413	W	05-14-13 15:55		463148-012
MW29 051413	W	05-14-13 17:20		463148-013
MW31 051413	W	05-14-13 18:25		463148-014
TRIP BLANK	W	05-14-13 00:00		463148-015

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*31-MAY-13*
Work Order Number(s):	*463148*	Date Received:	*05/15/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-913686 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 913686, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463148-002, -001.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW62A 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-001** | Date Collected: 05.14.13 09.30 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**60.4**	5.00	0.140	mg/L	05.17.13 08:15		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**502**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0227**	0.0200	0.00756	mg/L	05.24.13 03:39		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 03:39	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 03:39	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 03:39	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 913686 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW62A 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-001** | Date Collected: 05.14.13 09.30 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 19:28	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 19:28	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 19:28	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 19:28	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	125	70 - 135	%		
o-Terphenyl	129	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914153 | Date Prep: 05.20.13 11.00

Prep seq: 638381

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 18:30	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 18:30	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 18:30	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 18:30	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 18:30	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 18:30	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 18:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	87	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW26 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-002** | Date Collected: 05.14.13 15.10 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**484**	10.0	0.280	mg/L	05.17.13 08:36		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1730**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:02	U	1
Chromium	7440-47-3	**0.00527**	0.0100	0.00355	mg/L	05.24.13 04:02	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:02	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:02	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 913686 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW26 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-002** | Date Collected: 05.14.13 15.10 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 10:51	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 10:51	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 10:51	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 10:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	115	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914153 | Date Prep: 05.20.13 11.00

Prep seq: 638381

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 18:46	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 18:46	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 18:46	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 18:46	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 18:46	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 18:46	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 18:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	86	80 - 120	%		
4-Bromofluorobenzene	85	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW69 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-003** | Date Collected: 05.14.13 11.15 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**877**	20.0	0.560	mg/L	05.17.13 08:58		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2190**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:08	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 04:08	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:08	U	1
Manganese	7439-96-5	**0.539**	0.0200	0.00291	mg/L	05.24.13 04:08		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW69 051413** | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-003** | Date Collected: 05.14.13 11.15 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 10:32	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 10:32	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 10:32	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 10:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 21:13	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 21:13	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 21:13	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 21:13	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 21:13	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 21:13	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 21:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	114	80 - 120	%		
4-Bromofluorobenzene	116	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW24 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-004** | Date Collected: 05.14.13 13.40 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**443**	20.0	0.560	mg/L	05.17.13 09:20		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2230**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:14	U	1
Chromium	7440-47-3	**0.0723**	0.0100	0.00355	mg/L	05.24.13 04:14		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:14	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:14	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0651**	0.0100	0.00500	mg/L	05.15.13 08:50		1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW24 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-004** | Date Collected: 05.14.13 13.40 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 11:45	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 11:45	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 11:45	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 11:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	117	70 - 135	%		
o-Terphenyl	124	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 21:29	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 21:29	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 21:29	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 21:29	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 21:29	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 21:29	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 21:29	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	119	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW25 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-005** | Date Collected: 05.14.13 14.25 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**531**	20.0	0.560	mg/L	05.17.13 09:42		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2490**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:32	U	1
Chromium	7440-47-3	**0.0269**	0.0100	0.00355	mg/L	05.24.13 04:32		1
Iron	7439-89-6	**0.993**	0.200	0.0188	mg/L	05.24.13 04:32		1
Manganese	7439-96-5	**0.120**	0.0200	0.00291	mg/L	05.24.13 04:32		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW25 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-005** | Date Collected: 05.14.13 14.25 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 10:58	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**1.29**	1.50	0.988	mg/L	05.22.13 10:58	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 10:58	U	1
Total TPH	PHC635	**1.29**		0.988	mg/L	05.22.13 10:58	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	126	70 - 135	%		
o-Terphenyl	130	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 21:46	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 21:46	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 21:46	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 21:46	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 21:46	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 21:46	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 21:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	80 - 120	%		
4-Bromofluorobenzene	91	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IMW90SA 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-006** | Date Collected: 05.14.13 16.20 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**166**	10.0	0.280	mg/L	05.17.13 10:47		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1150**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:38	U	1
Chromium	7440-47-3	**0.00542**	0.0100	0.00355	mg/L	05.24.13 04:38	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:38	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:38	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IMW90SA 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-006** | Date Collected: 05.14.13 16.20 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 11:25	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 11:25	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 11:25	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 11:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	109	70 - 135	%		
o-Terphenyl	119	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:02	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:02	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:02	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:02	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:02	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:02	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	80 - 120	%		
4-Bromofluorobenzene	101	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW27 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-007** | Date Collected: 05.14.13 18.00 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**98.3**	10.0	0.280	mg/L	05.17.13 11:08		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1030**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:44	U	1
Chromium	7440-47-3	**0.0123**	0.0100	0.00355	mg/L	05.24.13 04:44		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:44	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:44	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW27 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-007** | Date Collected: 05.14.13 18.00 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 13:32	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 13:32	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 13:32	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 13:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	109	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:18	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:18	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:18	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:18	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:18	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:18	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	107	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW24 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-008** | Date Collected: 05.14.13 10.05 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**674**	20.0	0.560	mg/L	05.17.13 11:30		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1940**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 04:50	U	1
Chromium	7440-47-3	**0.0633**	0.0100	0.00355	mg/L	05.24.13 04:50		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:50	U	1
Manganese	7439-96-5	**0.00329**	0.0200	0.00291	mg/L	05.24.13 04:50	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0517**	0.0100	0.00500	mg/L	05.15.13 08:50		1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW24 051413** | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-008** | Date Collected: 05.14.13 10.05 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 13:59	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 13:59	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 13:59	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 13:59	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	115	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:35	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:35	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:35	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:35	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:35	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:35	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:35	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	95	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW70 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-009** | Date Collected: 05.14.13 10.55 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**192**	5.00	0.140	mg/L	05.17.13 11:52		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**821**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0208**	0.0200	0.00756	mg/L	05.24.13 04:56		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 04:56	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 04:56	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 04:56	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW70 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-009** | Date Collected: 05.14.13 10.55 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 14:26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 14:26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 14:26	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 14:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	108	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 22:51	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 22:51	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 22:51	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 22:51	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 22:51	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 22:51	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 22:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	82	80 - 120	%		
4-Bromofluorobenzene	110	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW70A 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-010** | Date Collected: 05.14.13 13.20 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**46.8**	5.00	0.140	mg/L	05.17.13 12:13		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**541**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0203**	0.0200	0.00756	mg/L	05.24.13 05:02		1
Chromium	7440-47-3	**0.00406**	0.0100	0.00355	mg/L	05.24.13 05:02	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:02	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:02	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW70A 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-010** | Date Collected: 05.14.13 13.20 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 14:53	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 14:53	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 14:53	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 14:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	105	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 23:07	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 23:07	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 23:07	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 23:07	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 23:07	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 23:07	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 23:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	80 - 120	%		
4-Bromofluorobenzene	112	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW58 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-011** | Date Collected: 05.14.13 14.55 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**967**	20.0	0.560	mg/L	05.17.13 16:57		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3790**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0111**	0.0200	0.00756	mg/L	05.24.13 05:07	J	1
Chromium	7440-47-3	**2.58**	0.0100	0.00355	mg/L	05.24.13 05:07		1
Iron	7439-89-6	**0.0612**	0.200	0.0188	mg/L	05.24.13 05:07	J	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:07	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**2.52**	0.100	0.0500	mg/L	05.15.13 08:50		10

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW58 051413** | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-011** | Date Collected: 05.14.13 14.55 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 11:52	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 11:52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 11:52	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 11:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	114	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 23:23	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 23:23	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 23:23	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 23:23	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 23:23	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 23:23	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 23:23	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	101	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW30 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-012** | Date Collected: 05.14.13 15.55 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**127**	5.00	0.140	mg/L	05.17.13 17:18		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**696**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0209**	0.0200	0.00756	mg/L	05.24.13 05:14		1
Chromium	7440-47-3	**0.00363**	0.0100	0.00355	mg/L	05.24.13 05:14	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:14	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:14	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914281 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW30 051413** | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-012** | Date Collected: 05.14.13 15.55 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 15:47	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 15:47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 15:47	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 15:47	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	108	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 23:56	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 23:56	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 23:56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 23:56	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 23:56	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 23:56	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 23:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	80 - 120	%		
4-Bromofluorobenzene	110	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW29 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-013** | Date Collected: 05.14.13 17.20 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**141**	5.00	0.140	mg/L	05.17.13 17:40		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**546**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0189**	0.0200	0.00756	mg/L	05.24.13 05:19	J	1
Chromium	7440-47-3	**0.0148**	0.0100	0.00355	mg/L	05.24.13 05:19		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:19	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 05:19	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914282 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW29 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-013** | Date Collected: 05.14.13 17.20 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 12:19	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 12:19	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 12:19	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 12:19	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 00:12	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 00:12	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 00:12	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 00:12	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 00:12	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 00:12	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 00:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	97	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW31 051413 | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-014** | Date Collected: 05.14.13 18.25 | Date Received: 05.15.13 09.45

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**106**	5.00	0.140	mg/L	05.17.13 18:02		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: ANS | % Moist: | Tech: ANS

Seq Number: 914023 | Date Prep:

Subcontractor: SUB: E871002 | Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**802**	5.00	5.00	mg/L	05.20.13 08:43		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914595 | Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0122**	0.0200	0.00756	mg/L	05.24.13 05:25	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 05:25	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 05:25	U	1
Manganese	7439-96-5	**0.438**	0.0200	0.00291	mg/L	05.24.13 05:25		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914282 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW31 051413** | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-014** | Date Collected: 05.14.13 18.25 | Date Received: 05.15.13 09.45

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 12:46	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 12:46	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 12:46	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 12:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 00:29	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 00:29	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 00:29	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 00:29	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 00:29	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 00:29	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 00:29	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	97	80 - 120	%		
4-Bromofluorobenzene	85	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: TRIP BLANK | Matrix: Water | Sample Depth:

Lab Sample Id: **463148-015** | Date Collected: 05.14.13 00.00 | Date Received: 05.15.13 09.45

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 00:45	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 00:45	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 00:45	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 00:45	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 00:45	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 00:45	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 00:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	80 - 120	%		
4-Bromofluorobenzene	89	80 - 120	%		

Sample Id: 638381-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638381-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914153 | Date Prep: 05.20.13 11.00

Prep seq: 638381

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 13:34	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 13:34	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 13:34	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 13:34	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 13:34	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	80 - 120	%		
4-Bromofluorobenzene	107	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638382-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638382-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914154 Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.17.13 06:26	U	1

Sample Id: 638383-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638383-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** Prep Method: 5030B

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914155 Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 20:08	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 20:08	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 20:08	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	81	80 - 120	%		
4-Bromofluorobenzene	118	80 - 120	%		

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638442-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638442-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914402 Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 05:04	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	109	70 - 135	%		

Sample Id: 638553-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638553-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** Prep Method: 3010A

Analyst: KUG % Moist: Tech: KUG

Seq Number: 914595 Date Prep: 05.23.13 12.00

Subcontractor: SUB: E871002 Prep seq: 638553

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 11:25	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 11:25	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 11:25	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 11:25	U	1

Sample Id: 913686-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **913686-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 913686 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Certificate of Analytical Results 463148

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 914023-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914023-1-BLK** Date Collected: Date Received:

Analytical Method: **TDS by SM2540C** Prep Method:

Analyst: ANS % Moist: Tech: ANS

Seq Number: 914023 Date Prep:

Subcontractor: SUB: E871002 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.20.13 08:43	U	1

Sample Id: 914281-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914281-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914281 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Sample Id: 914282-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914282-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914282 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.15.13 08:50	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463148, **Project ID:** 073018

Lab Batch #: 914153 **Sample:** 638381-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 13:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 914153 **Sample:** 638381-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 13:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 914153 **Sample:** 638381-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 13:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 914153 **Sample:** 463050-005 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 16:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 914153 **Sample:** 463050-005 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 16:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463148, **Project ID:** 073018

Lab Batch #: 914155 **Sample:** 638383-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 19:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 08:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463148, **Project ID:** 073018

Lab Batch #: 914402 **Sample:** 463050-012 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 14:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.69	10.0	97	70-135	
o-Terphenyl	3.99	5.00	80	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.4	10.0	104	70-135	
o-Terphenyl	4.19	5.00	84	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	4.09	5.00	82	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 05:04

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	5.44	5.00	109	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Lab Batch #: 913686 **Sample:** 913686-1-BKS **Matrix:** Water
Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0223	89	80-120	

Lab Batch #: 914281 **Sample:** 914281-1-BKS **Matrix:** Water
Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0222	89	80-120	

Lab Batch #: 914282 **Sample:** 914282-1-BKS **Matrix:** Water
Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0239	96	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/20/2013

Lab Batch ID: 914153 **Sample:** 638381-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0952	95	0.100	0.0948	95	0	70-125	25	
Toluene	<0.00100	0.100	0.102	102	0.100	0.0965	97	6	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0998	100	0.100	0.105	105	5	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.200	100	0.200	0.199	100	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0993	99	0.100	0.0974	97	2	71-133	25	

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914155 **Sample:** 638383-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.108	108	0.100	0.113	113	5	70-125	25	
Toluene	<0.00100	0.100	0.118	118	0.100	0.120	120	2	70-125	25	
Ethylbenzene	<0.000700	0.100	0.119	119	0.100	0.119	119	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.238	119	0.200	0.231	116	3	70-131	25	
o-Xylene	<0.000700	0.100	0.118	118	0.100	0.114	114	3	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Analyst: KUG **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/24/2013

Lab Batch ID: 914595 **Sample:** 638553-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.990	99	1.00	0.971	97	2	80-120	20	
Chromium	<0.00355	1.00	1.03	103	1.00	1.02	102	1	80-120	20	
Iron	<0.0188	5.00	4.62	92	5.00	4.51	90	2	80-120	20	
Manganese	<0.00291	1.00	0.904	90	1.00	0.890	89	2	80-120	20	

Analyst: AMB **Date Prepared:** 05/16/2013 **Date Analyzed:** 05/17/2013

Lab Batch ID: 914154 **Sample:** 638382-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.5	102	25.0	25.7	103	1	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463148 **Project ID:** 073018

Analyst: ANS **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/20/2013

Lab Batch ID: 914023 **Sample:** 914023-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Total dissolved solids	<5.00	1000	1030	103	1000	949	95	8	80-120	30	

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914402 **Sample:** 638442-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	107	107	100	104	104	3	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	112	112	100	109	109	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463148

Lab Batch #: 914154 **Project ID:** 073018

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463058-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	20.9	50.0	72.9	104	80-120	

Lab Batch #: 914154

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463148-010 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	46.8	125	183	109	80-120	

Lab Batch #: 914402

Date Analyzed: 05/22/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

QC- Sample ID: 463050-012 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	99.3	99	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	108	108	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463148 **Project ID:** 073018

Lab Batch ID: 914153 **QC- Sample ID:** 463050-005 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/20/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.109	109	0.100	0.0968	97	12	70-125	25	
Toluene	<0.00100	0.100	0.118	118	0.100	0.0989	99	18	70-125	25	
Ethylbenzene	<0.000700	0.100	0.114	114	0.100	0.103	103	10	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.230	115	0.200	0.194	97	17	70-131	25	
o-Xylene	<0.000700	0.100	0.112	112	0.100	0.0975	98	14	71-133	25	

Lab Batch ID: 914155 **QC- Sample ID:** 463245-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/20/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.102	102	0.100	0.0948	95	7	70-125	25	
Toluene	<0.00100	0.100	0.106	106	0.100	0.107	107	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.109	109	0.100	0.109	109	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.203	102	0.200	0.208	104	2	70-131	25	
o-Xylene	<0.000700	0.100	0.0997	100	0.100	0.0982	98	2	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463148 **Project ID:** 073018

Lab Batch ID: 913686 **QC- Sample ID:** 463112-006 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.242	97	0.250	0.245	98	1	80-120	20	

Lab Batch ID: 914281 **QC- Sample ID:** 463148-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.239	96	0.250	0.240	96	0	80-120	20	

Lab Batch ID: 914282 **QC- Sample ID:** 463148-013 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/15/2013 **Date Prepared:** 05/15/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.243	97	0.250	0.248	99	2	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463148 **Project ID:** 073018

Lab Batch ID: 914595 **QC- Sample ID:** 463148-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/24/2013 **Date Prepared:** 05/23/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.0227	1.00	0.893	87	1.00	0.967	94	8	75-125	20	
Chromium	<0.00355	1.00	0.892	89	1.00	0.958	96	7	75-125	20	
Iron	<0.0188	5.00	3.91	78	5.00	4.24	85	8	75-125	20	
Manganese	<0.00291	1.00	0.787	79	1.00	0.846	85	7	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463148

Lab Batch #: 913686 **Project ID:** 073018
Date Analyzed: 05/15/2013 08:50 **Date Prepared:** 05/15/2013 **Analyst:** WRU
QC- Sample ID: 463112-006 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914281
Date Analyzed: 05/15/2013 08:50 **Date Prepared:** 05/15/2013 **Analyst:** WRU
QC- Sample ID: 463148-003 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914282
Date Analyzed: 05/15/2013 08:50 **Date Prepared:** 05/15/2013 **Analyst:** WRU
QC- Sample ID: 463148-013 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914023
Date Analyzed: 05/20/2013 08:43 **Date Prepared:** 05/20/2013 **Analyst:** ANS
QC- Sample ID: 463148-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	502	522	4	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463148

Lab Batch #: 914023 **Project ID:** 073018

Date Analyzed: 05/20/2013 08:43 **Date Prepared:** 05/20/2013 **Analyst:** ANS

QC- Sample ID: 463148-011 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	3790	3910	3	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322887 Page 1 of 2

Company-City: CRA - Midland **Phone:** 432-686-0086

Lab Only: 463148

Project Name-Location: NEwice ☐ Previously done at XENCO **Project ID:** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM): mike wisniowicki

E-mail Results to ☒ PM and **Fax No:** 432-686-0086

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Justin Nixon **Signature:**

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals method 6010 B	TDS SM 2540C	Chlorides E300	TPH GRO + DRO 8015 modified	Hex chrome 7196A				TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW62A 051413	5-14-13	930		W		X	7													X	X	X	X	X	X											1
2	IW26 051413	↓	1510		↓		↓	↓													↓	↓	↓	↓	↓	↓											2
3	MW69 051413	↓	1115		↓		↓	↓													↓	↓	↓	↓	↓	↓											3
4	IW24 051413	↓	1340		↓		↓	↓													↓	↓	↓	↓	↓	↓											4
5	IW25 051413	↓	1425		↓		↓	↓													↓	↓	↓	↓	↓	↓											5
6	MW90A 051413	↓	1620		↓		↓	↓													↓	↓	↓	↓	↓	↓											6
7	IW27 051413	↓	1800		↓		↓	↓													↓	↓	↓	↓	↓	↓											7
8	MW24 051413	↓	1005		↓		↓	↓													↓	↓	↓	↓	↓	↓											8
9	MW70 051413	↓	1055		↓		↓	↓													↓	↓	↓	↓	↓	↓											9
10	MW70A 051413	↓	1320		↓		↓	↓													↓	↓	↓	↓	↓	↓											10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1)	5-14-13	2) SHOCPI KOLUMA	5/14/13
2	3)		4)	1960
3	5)		6)	5-15-13 9:45

Total Containers per COC: 7 Cooler Temp: 1.5 °C

Otherwise agreed on writing, Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322888 Page 2 of 2

Company-City CRA - Midland **Phone** 432-686-0080

Lab Only: 463148

Project Name-Location N. Eunice ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)** Mike Wisnio Witchi

E-mail Results to ☒ PM and **Fax No:** 432-6860180

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature** [signature]

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021B BTEX	Diss metals method 6010B	TDS Sm2540c	Chlorides E300	TPH GRO + DRO 8015 mod	Hex Chrom 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW5805141 3	5-14-13	1455		W		X	7													X	X	X	X	X	X											1
2	MW3005141 3	↓	1555		↓		↓	↓													↓	↓	↓	↓	↓	↓											2
3	MW2905141 3	↓	1720		↓		↓	↓													↓	↓	↓	↓	↓	↓											3
4	MW3105141 3	↓	1825		↓		↓	↓													↓	↓	↓	↓	↓	↓											4
5	Trip Blank	↓			↓		↓	2													X	↓	↓	↓	↓	↓											5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) [signature]	5-14-13	2) STEPHANIE KOAKINA	5/14/13 19:00
3)		4)	
5)		6)	

Total Containers per COC: 9 Cooler Temp: 1.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/15/2013 09:45:00 AM

Work Order #: 463148

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/16/2013

Checklist reviewed by: Kelsey Brooks Date: 05/16/2013

Analytical Report 463245

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

29-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

29-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463245**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463245. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463245 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
IW28 051513	W	05-15-13 09:40		463245-001
MW9 051513	W	05-15-13 10:25		463245-002
MW9A 051513	W	05-15-13 11:40		463245-003
MW60 051513	W	05-15-13 09:50		463245-004
MW95 051513	W	05-15-13 11:30		463245-005
MW89SA 051513	W	05-15-13 13:40		463245-006
MW4 051513	W	05-15-13 15:00		463245-007
MW4A 051513	W	05-15-13 15:35		463245-008
DUP-4-051513	W	05-15-13 00:00		463245-009
MW37 051513	W	05-15-13 17:10		463245-010
MW94 051513	W	05-15-13 16:05		463245-011
MW68 051513	W	05-15-13 14:15		463245-012
MW61 051513	W	05-15-13 17:45		463245-013
TRIP BLANK	W	05-15-13 00:00		463245-014

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*29-MAY-13*
Work Order Number(s):	*463245*	Date Received:	*05/16/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-914283 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914283, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463245-006, -005, -002, -004, -003, -001.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Batch: LBA-914286 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914286, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463245-011, -008, -009, -007, -010, -012, -013.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*29-MAY-13*
Work Order Number(s):	*463245*	Date Received:	*05/16/2013*

Batch: LBA-914600 Dissolved Metals per ICP by SW846 6010B
SW6010B

Batch 914600, Iron detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463245-006, -005, -002, -004, -011, -008, -009, -003, -007, -001, -010, -012, -013.

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **IW28 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-001** Date Collected: 05.15.13 09.40 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**140**	10.0	0.280	mg/L	05.17.13 18:23		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1300**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0110**	0.0200	0.00756	mg/L	05.24.13 01:18	J	1
Chromium	7440-47-3	**0.0202**	0.0100	0.00355	mg/L	05.24.13 01:18		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 01:18	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:18	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914283 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0127**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**IW28 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-001**	Date Collected: 05.15.13 09.40	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.20.13 14.00	Tech:	DYV
Seq Number:	914402	Prep seq:	638442		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 14:07	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 14:07	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 14:07	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 14:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.20.13 17.00	Tech:	DYV
Seq Number:	914155	Prep seq:	638383		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 20:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 20:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 20:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 20:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 20:24	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 20:24	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 20:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	119	80 - 120	%		
4-Bromofluorobenzene	111	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW9 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-002** Date Collected: 05.15.13 10.25 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**132**	10.0	0.280	mg/L	05.17.13 18:45		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1180**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 01:47	U	1
Chromium	7440-47-3	**0.0196**	0.0100	0.00355	mg/L	05.24.13 01:47		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 01:47	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:47	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914283 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0136**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW9 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-002**	Date Collected: 05.15.13 10.25	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 21:11	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 21:11	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 21:11	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 21:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	114	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:41	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:41	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:41	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:41	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:41	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 18:41	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 18:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	80 - 120	%		
4-Bromofluorobenzene	100	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW9A 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-003** Date Collected: 05.15.13 11.40 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**524**	20.0	0.560	mg/L	05.17.13 19:07		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2080**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00949**	0.0200	0.00756	mg/L	05.24.13 01:53	J	1
Chromium	7440-47-3	**0.633**	0.0100	0.00355	mg/L	05.24.13 01:53		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 01:53	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:53	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914283 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.638**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW9A 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-003**	Date Collected: 05.15.13 11.40	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 21:36	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 21:36	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 21:36	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 21:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	109	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:57	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:57	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:57	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:57	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:57	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 18:57	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 18:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	80 - 120	%		
4-Bromofluorobenzene	83	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW60 051513**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463245-004**	Date Collected: 05.15.13 09.50		Date Received: 05.16.13 09.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.16.13 10.00	Tech:	AMB
Seq Number:	914154	Prep seq:	638382		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1140**	20.0	0.560	mg/L	05.17.13 19:29		20

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914097	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4310**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.23.13 11.30	Tech:	KUG
Seq Number:	914600	Prep seq:	638552		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00865**	0.0200	0.00756	mg/L	05.24.13 02:10	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 02:10	U	1
Iron	7439-89-6	**0.275**	0.200	0.0188	mg/L	05.24.13 02:10		1
Manganese	7439-96-5	**2.10**	0.0200	0.00291	mg/L	05.24.13 02:10		1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914283	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW60 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-004**	Date Collected: 05.15.13 09.50	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 22:02	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 22:02	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 22:02	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 22:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 19:13	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 19:13	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 19:13	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 19:13	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 19:13	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 19:13	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 19:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	107	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW95 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-005** Date Collected: 05.15.13 11.30 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1510**	50.0	1.40	mg/L	05.17.13 19:50		50

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4630**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0130**	0.0200	0.00756	mg/L	05.24.13 02:16	J	1
Chromium	7440-47-3	**4.81**	0.0100	0.00355	mg/L	05.24.13 02:16		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:16	U	1
Manganese	7439-96-5	**0.0761**	0.0200	0.00291	mg/L	05.24.13 02:16		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914283 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**4.83**	0.100	0.0500	mg/L	05.16.13 08:55		10

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW95 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-005**	Date Collected: 05.15.13 11.30	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 22:27	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 22:27	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 22:27	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 22:27	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 19:30	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 19:30	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 19:30	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 19:30	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 19:30	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 19:30	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 19:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	109	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW89SA 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-006** Date Collected: 05.15.13 13.40 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**102**	10.0	0.280	mg/L	05.17.13 22:00		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**831**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 02:22	U	1
Chromium	7440-47-3	**0.0381**	0.0100	0.00355	mg/L	05.24.13 02:22		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:22	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 02:22	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914283 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0299**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW89SA 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-006**	Date Collected: 05.15.13 13.40	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 22:52	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 22:52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 22:52	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 22:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 19:47	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 19:47	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 19:47	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 19:47	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 19:47	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 19:47	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 19:47	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW4 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-007** Date Collected: 05.15.13 15.00 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**298**	10.0	0.280	mg/L	05.17.13 22:44		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1810**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 02:28	U	1
Chromium	7440-47-3	**0.123**	0.0100	0.00355	mg/L	05.24.13 02:28		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:28	U	1
Manganese	7439-96-5	**0.0134**	0.0200	0.00291	mg/L	05.24.13 02:28	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914286 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0998**	0.0100	0.00500	mg/L	05.16.13 08:55	X	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW4 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-007**	Date Collected: 05.15.13 15.00	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 23:17	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 23:17	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 23:17	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 23:17	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	108	70 - 135	%		
o-Terphenyl	118	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:03	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:03	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:03	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:03	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:03	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:03	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:03	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW4A 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-008** Date Collected: 05.15.13 15.35 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**326**	10.0	0.280	mg/L	05.17.13 23:06		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1300**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0124**	0.0200	0.00756	mg/L	05.24.13 02:34	J	1
Chromium	7440-47-3	**0.00738**	0.0100	0.00355	mg/L	05.24.13 02:34	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:34	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 02:34	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914286 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW4A 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-008**	Date Collected: 05.15.13 15.35	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 23:43	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 23:43	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 23:43	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 23:43	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:19	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:19	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:19	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:19	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:19	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:19	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:19	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	91	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **DUP-4-051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-009** Date Collected: 05.15.13 00.00 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**299**	20.0	0.560	mg/L	05.17.13 23:27		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2280**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 02:40	U	1
Chromium	7440-47-3	**0.399**	0.0100	0.00355	mg/L	05.24.13 02:40		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:40	U	1
Manganese	7439-96-5	**0.0125**	0.0200	0.00291	mg/L	05.24.13 02:40	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914286 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.395**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**DUP-4-051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-009**	Date Collected: 05.15.13 00.00	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 00:08	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 00:08	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 00:08	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 00:08	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	105	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:36	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:36	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:36	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:36	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:36	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:36	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW37 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-010** Date Collected: 05.15.13 17.10 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**343**	10.0	0.280	mg/L	05.17.13 23:49		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1540**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0228**	0.0200	0.00756	mg/L	05.24.13 02:46		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 02:46	U	1
Iron	7439-89-6	**0.650**	0.200	0.0188	mg/L	05.24.13 02:46		1
Manganese	7439-96-5	**0.0291**	0.0200	0.00291	mg/L	05.24.13 02:46		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914286 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0110**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW37 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-010**	Date Collected: 05.15.13 17.10	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	**7.09**	1.50	0.988	mg/L	05.22.13 05:25		1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**4.10**	1.50	0.988	mg/L	05.22.13 05:25		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 05:25	U	1
Total TPH	PHC635	**11.2**		0.988	mg/L	05.22.13 05:25		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	108	70 - 135	%		
o-Terphenyl	118	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.23.13 10.30	Tech:	DYV
Seq Number:	914531	Prep seq:	638611		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**6.62**	0.0500	0.0250	mg/L	05.23.13 12:00		50
Toluene	108-88-3	ND	0.100	0.0500	mg/L	05.23.13 12:00	U	50
Ethylbenzene	100-41-4	**0.534**	0.0500	0.0350	mg/L	05.23.13 12:00		50
m,p-Xylenes	179601-23-1	**0.134**	0.100	0.0700	mg/L	05.23.13 12:00		50
o-Xylene	95-47-6	ND	0.0500	0.0350	mg/L	05.23.13 12:00	U	50
Total Xylenes	1330-20-7	**0.134**		0.0350	mg/L	05.23.13 12:00		
Total BTEX		**7.29**		0.0250	mg/L	05.23.13 12:00		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	113	80 - 120	%		
4-Bromofluorobenzene	109	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW94 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-011** Date Collected: 05.15.13 16.05 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**297**	20.0	0.560	mg/L	05.18.13 00:11		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2400**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00923**	0.0200	0.00756	mg/L	05.24.13 02:52	J	1
Chromium	7440-47-3	**0.402**	0.0100	0.00355	mg/L	05.24.13 02:52		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:52	U	1
Manganese	7439-96-5	**0.0143**	0.0200	0.00291	mg/L	05.24.13 02:52	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914286 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.385**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW94 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-011**	Date Collected: 05.15.13 16.05	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 00:33	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 00:33	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 00:33	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 00:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	107	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:52	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:52	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:52	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:52	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:52	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:52	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	103	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW68 051513**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463245-012**	Date Collected: 05.15.13 14.15		Date Received: 05.16.13 09.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.17.13 10.00	Tech:	AMB
Seq Number:	914158	Prep seq:	638385		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**120**	5.00	0.140	mg/L	05.18.13 00:32		5

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914558	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**820**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.23.13 11.30	Tech:	KUG
Seq Number:	914600	Prep seq:	638552		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0113**	0.0200	0.00756	mg/L	05.24.13 02:58	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 02:58	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:58	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 02:58	U	1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914286	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW68 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-012**	Date Collected: 05.15.13 14.15	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.21.13 15.30	Tech:	DYV
Seq Number:	914269	Prep seq:	638441		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 01:24	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 01:24	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 01:24	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 01:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 21:09	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 21:09	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 21:09	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 21:09	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 21:09	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 21:09	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 21:09	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	80 - 120	%		
4-Bromofluorobenzene	104	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW61 051513** Matrix: Water Sample Depth:

Lab Sample Id: **463245-013** Date Collected: 05.15.13 17.45 Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**554**	20.0	0.560	mg/L	05.18.13 00:54		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2550**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0232**	0.0200	0.00756	mg/L	05.24.13 03:04		1
Chromium	7440-47-3	**3.84**	0.0100	0.00355	mg/L	05.24.13 03:04		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 03:04	U	1
Manganese	7439-96-5	**0.00544**	0.0200	0.00291	mg/L	05.24.13 03:04	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914286 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**3.82**	0.100	0.0500	mg/L	05.16.13 08:55		10

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW61 051513**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463245-013**	Date Collected: 05.15.13 17.45	Date Received: 05.16.13 09.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 15:26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 15:26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 15:26	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 15:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 21:41	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 21:41	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 21:41	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 21:41	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 21:41	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 21:41	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 21:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **TRIP BLANK** Matrix: Water Sample Depth:

Lab Sample Id: **463245-014** Date Collected: 05.15.13 00.00 Date Received: 05.16.13 09.40

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.21.13 15.00 Tech: DYV

Seq Number: 914299 Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 21:57	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 21:57	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 21:57	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 21:57	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 21:57	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 21:57	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 21:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	81	80 - 120	%		
4-Bromofluorobenzene	96	80 - 120	%		

Sample Id: **638382-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638382-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.16.13 10.00 Tech: AMB

Seq Number: 914154 Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.17.13 06:26	U	1

Certificate of Analytical Results 463245

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North Eunice

Sample Id: **638383-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638383-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.20.13 17.00 Tech: DYV

Seq Number: 914155 Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 20:08	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 20:08	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 20:08	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	81	80 - 120	%		
4-Bromofluorobenzene	118	80 - 120	%		

Sample Id: **638385-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638385-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914158 Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.17.13 20:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638441-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638441-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** % Moist: Prep Method: 1005

Analyst: DYV Date Prep: 05.21.13 15.30 Tech: DYV

Seq Number: 914269 Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 20:20	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 20:20	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 20:20	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 20:20	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	95	70 - 135	%		
o-Terphenyl	104	70 - 135	%		

Sample Id: **638442-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638442-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** % Moist: Prep Method: 1005

Analyst: DYV Date Prep: 05.20.13 14.00 Tech: DYV

Seq Number: 914402 Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 05:04	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	109	70 - 135	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638464-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638464-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.21.13 15.00 Tech: DYV

Seq Number: 914299 Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	117	80 - 120	%		

Sample Id: **638552-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638552-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.23.13 11.30 Tech: KUG

Seq Number: 914600 Prep seq: 638552

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 01:00	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 01:00	U	1
Iron	7439-89-6	**0.0282**	0.200	0.0188	mg/L	05.24.13 01:00	J	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:00	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638611-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638611-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.23.13 10.30 Tech: DYV

Seq Number: 914531 Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 11:44	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 11:44	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 11:44	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	116	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Sample Id: **638628-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638628-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** % Moist: Prep Method: 1005

Analyst: DYV Date Prep: 05.23.13 11.00 Tech: DYV

Seq Number: 914553 Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 14:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **914097-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914097-1-BLK** Date Collected: Date Received:

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914097 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.17.13 11:00	U	1

Sample Id: **914283-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914283-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914283 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Sample Id: **914286-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914286-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914286 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Sample Id: **914558-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914558-1-BLK** Date Collected: Date Received:

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.21.13 10:00	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914155 **Sample:** 638383-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 19:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 08:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914299 **Sample:** 638464-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 17:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914531 **Sample:** 638611-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 13:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0353	0.0300	118	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914269 **Sample:** 638441-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 19:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.9	10.0	109	70-135	
o-Terphenyl	3.92	5.00	78	70-135	

Lab Batch #: 914269 **Sample:** 638441-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 19:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.0	10.0	110	70-135	
o-Terphenyl	3.94	5.00	79	70-135	

Lab Batch #: 914269 **Sample:** 638441-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 20:20

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.52	10.0	95	70-135	
o-Terphenyl	5.19	5.00	104	70-135	

Lab Batch #: 914269 **Sample:** 463245-002 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 04:59

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.3	10.0	113	70-135	
o-Terphenyl	4.00	5.00	80	70-135	

Lab Batch #: 914402 **Sample:** 463050-012 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 14:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.69	10.0	97	70-135	
o-Terphenyl	3.99	5.00	80	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914402 **Sample:** 638442-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.4	10.0	104	70-135	
o-Terphenyl	4.19	5.00	84	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	4.09	5.00	82	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 05:04

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	5.44	5.00	109	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 12:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	10.0	121	70-135	
o-Terphenyl	5.98	5.00	120	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914553 **Sample:** 638628-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.06	5.00	121	70-135	

Lab Batch #: 914553 **Sample:** 463335-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 21:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.33	5.00	127	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Lab Batch #: 914283 **Sample:** 914283-1-BKS **Matrix:** Water
Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0228	91	80-120	

Lab Batch #: 914286 **Sample:** 914286-1-BKS **Matrix:** Water
Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0215	86	80-120	

Lab Batch #: 914097 **Sample:** 914097-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	1070	107	80-120	

Lab Batch #: 914558 **Sample:** 914558-1-BKS **Matrix:** Water
Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	977	98	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914155 **Sample:** 638383-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.108	108	0.100	0.113	113	5	70-125	25	
Toluene	<0.00100	0.100	0.118	118	0.100	0.120	120	2	70-125	25	
Ethylbenzene	<0.000700	0.100	0.119	119	0.100	0.119	119	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.238	119	0.200	0.231	116	3	70-131	25	
o-Xylene	<0.000700	0.100	0.118	118	0.100	0.114	114	3	71-133	25	

Analyst: DYV **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914299 **Sample:** 638464-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0977	98	0.100	0.102	102	4	70-125	25	
Toluene	<0.00100	0.100	0.105	105	0.100	0.106	106	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.114	114	0.100	0.111	111	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.209	105	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0991	99	0.100	0.107	107	8	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914531 **Sample:** 638611-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0931	93	0.100	0.0967	97	4	70-125	25	
Toluene	<0.00100	0.100	0.119	119	0.100	0.105	105	13	70-125	25	
Ethylbenzene	<0.000700	0.100	0.118	118	0.100	0.113	113	4	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.228	114	0.200	0.216	108	5	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.105	105	3	71-133	25	

Analyst: KUG **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/24/2013

Lab Batch ID: 914600 **Sample:** 638552-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.974	97	1.00	0.993	99	2	80-120	20	
Chromium	<0.00355	1.00	1.01	101	1.00	1.03	103	2	80-120	20	
Iron	0.0282	5.00	4.63	93	5.00	4.64	93	0	80-120	20	
Manganese	<0.00291	1.00	0.893	89	1.00	0.909	91	2	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: AMB **Date Prepared:** 05/16/2013 **Date Analyzed:** 05/17/2013

Lab Batch ID: 914154 **Sample:** 638382-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.5	102	25.0	25.7	103	1	80-120	20	

Analyst: AMB **Date Prepared:** 05/17/2013 **Date Analyzed:** 05/17/2013

Lab Batch ID: 914158 **Sample:** 638385-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.6	102	25.0	25.6	102	0	80-120	20	

Analyst: DYV **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914269 **Sample:** 638441-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	101	101	100	102	102	1	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	107	107	100	108	108	1	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914402 **Sample:** 638442-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	107	107	100	104	104	3	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	112	112	100	109	109	3	70-135	25	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914553 **Sample:** 638628-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	109	109	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	115	115	100	112	112	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463245

Lab Batch #: 914154 **Project ID:** 073018

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463058-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	20.9	50.0	72.9	104	80-120	

Lab Batch #: 914154

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463148-010 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	46.8	125	183	109	80-120	

Lab Batch #: 914158

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB

QC- Sample ID: 463245-006 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	102	250	379	111	80-120	

Lab Batch #: 914269

Date Analyzed: 05/22/2013 **Date Prepared:** 05/21/2013 **Analyst:** DYV

QC- Sample ID: 463245-002 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	102	102	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	107	107	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463245

Lab Batch #: 914402 **Project ID:** 073018

Date Analyzed: 05/22/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

QC- Sample ID: 463050-012 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	99.3	99	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	108	108	70-135	

Lab Batch #: 914553

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

QC- Sample ID: 463335-003 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	106	106	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	114	114	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463245 **Project ID:** 073018

Lab Batch ID: 914155 **QC- Sample ID:** 463245-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/20/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.102	102	0.100	0.0948	95	7	70-125	25	
Toluene	<0.00100	0.100	0.106	106	0.100	0.107	107	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.109	109	0.100	0.109	109	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.203	102	0.200	0.208	104	2	70-131	25	
o-Xylene	<0.000700	0.100	0.0997	100	0.100	0.0982	98	2	71-133	25	

Lab Batch ID: 914299 **QC- Sample ID:** 463245-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0956	96	0.100	0.108	108	12	70-125	25	
Toluene	<0.00100	0.100	0.108	108	0.100	0.102	102	6	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.117	117	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.216	108	2	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.112	112	4	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463245 **Project ID:** 073018

Lab Batch ID: 914531 **QC- Sample ID:** 463584-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.111	111	0.100	0.105	105	6	70-125	25	
Toluene	<0.00100	0.100	0.111	111	0.100	0.112	112	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.119	119	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.224	112	0.200	0.221	111	1	70-131	25	
o-Xylene	<0.000700	0.100	0.111	111	0.100	0.106	106	5	71-133	25	

Lab Batch ID: 914283 **QC- Sample ID:** 463219-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.207	0.250	0.449	97	0.200	0.455	124	1	80-120	20	X

Lab Batch ID: 914286 **QC- Sample ID:** 463245-007 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.0998	0.250	0.345	98	0.200	0.343	122	1	80-120	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463245 **Project ID:** 073018

Lab Batch ID: 914600 **QC- Sample ID:** 463245-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/24/2013 **Date Prepared:** 05/23/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.0110	1.00	1.02	101	1.00	0.964	95	6	75-125	20	
Chromium	0.0202	1.00	1.02	100	1.00	0.953	93	7	75-125	20	
Iron	<0.0188	5.00	4.31	86	5.00	4.07	81	6	75-125	20	
Manganese	<0.00291	1.00	0.874	87	1.00	0.830	83	5	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463245

Lab Batch #: 914283 **Project ID:** 073018
Date Analyzed: 05/16/2013 08:55 **Date Prepared:** 05/16/2013 **Analyst:** WRU
QC- Sample ID: 463219-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	0.207	0.207	0	20	

Lab Batch #: 914286
Date Analyzed: 05/16/2013 08:55 **Date Prepared:** 05/16/2013 **Analyst:** WRU
QC- Sample ID: 463245-007 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	0.0998	0.0998	0	20	

Lab Batch #: 914097
Date Analyzed: 05/17/2013 11:00 **Date Prepared:** 05/17/2013 **Analyst:** AMB
QC- Sample ID: 462925-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2800	2980	6	30	

Lab Batch #: 914097
Date Analyzed: 05/17/2013 11:00 **Date Prepared:** 05/17/2013 **Analyst:** AMB
QC- Sample ID: 463245-010 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	1540	1550	1	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463245

Lab Batch #: 914558 **Project ID:** 073018
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463245-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2400	2540	6	30	

Lab Batch #: 914558
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463335-008 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	440	448	2	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322926 Page of

Company-City: CRA-Midland **Phone:** 432-686-0086

Lab Only: 463245

Project Name-Location: N Eunice ☐ Previously done at XENCO **Project ID:** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM):** Mike Wisniewiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0086

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**

QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Justin Nixon **Signature:** [signature]

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021B BTEX	Diss Metals method 6010B	TDS SM 2540 C	Chlorides E300	TPH GRO + DRO 8015 mod	Hex Chrome 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	Jw28 051513	5-15-13	940		W		X	7													X	X	X	X	X	X											1
2	mw9 051513		1025																																		2
3	mw9A 051513		1140																																		3
4	mw60 051513		950																																		4
5	mw95 051513		1130																																		5
6	mw89S4 051513		1340																																		6
7	mw4 051513		1500																																		7
8	mw4A 051513		1535																																		8
9	Dup4 051513		—																																		9
10	mw37 051513		1710																																		10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) [signature]	5/15/13 1825	2) SHOICHI KOJIMA	5/15/13 18:23
2) 3)		4) [signature]	5-16-13 9:40
3) 5)		6)	

Total Containers per COC: 7 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

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Serial #: 322927 Page 2 of 2

Company-City CRA, Midland **Phone** 432-686-0086

Lab Only: 463245

Project Name-Location NEWIE ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)** Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0180

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals method 6010B	TDS sm 2540 c	Chlorides E300	TPH Grof DRO 8015 mod	Hex Chrome 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW4 051513	5-15-13	1605		W		X	7													X	X	X	X	X	X											1
2	MW8 051513	↓	1415		↓		↓	↓													↓	↓	↓	↓	↓	↓											2
3	MW1 051513	↓	1745		↓		↓	↓													↓	↓	↓	↓	↓	↓											3
4	Trip Blank	↓	—					2													↓	↓	↓	↓	↓	↓											4
5																																					5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1)	5/15/13 1825	2) SHOICHI KOJIMA	5/15/13 18:23
2	3)		4)	
3	5)		6)	

Total Containers per COC: 9 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/16/2013 09:40:00 AM

Work Order #: 463245

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/17/2013

Checklist reviewed by: Kelsey Brooks Date: 05/17/2013

Analytical Report 463245

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

31-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

31-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463245**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463245. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463245 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
IW28 051513	W	05-15-13 09:40		463245-001
MW9 051513	W	05-15-13 10:25		463245-002
MW9A 051513	W	05-15-13 11:40		463245-003
MW60 051513	W	05-15-13 09:50		463245-004
MW95 051513	W	05-15-13 11:30		463245-005
MW89SA 051513	W	05-15-13 13:40		463245-006
MW4 051513	W	05-15-13 15:00		463245-007
MW4A 051513	W	05-15-13 15:35		463245-008
DUP-4-051513	W	05-15-13 00:00		463245-009
MW37 051513	W	05-15-13 17:10		463245-010
MW94 051513	W	05-15-13 16:05		463245-011
MW68 051513	W	05-15-13 14:15		463245-012
MW61 051513	W	05-15-13 17:45		463245-013
TRIP BLANK	W	05-15-13 00:00		463245-014

Version: 1.%

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*31-MAY-13*
Work Order Number(s):	*463245*	Date Received:	*05/16/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-914286 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914286, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463245-011, -008, -009, -007, -010, -012, -013.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Batch: LBA-914600 Dissolved Metals per ICP by SW846 6010B
SW6010B

Batch 914600, Iron detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463245-006, -005, -002, -004, -011, -008, -009, -003, -007, -001, -010, -012, -013.

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*31-MAY-13*
Work Order Number(s):	*463245*	Date Received:	*05/16/2013*

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW28 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-001** | Date Collected: 05.15.13 09.40 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**140**	10.0	0.280	mg/L	05.17.13 18:23		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1300**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0110**	0.0200	0.00756	mg/L	05.24.13 01:18	J	1
Chromium	7440-47-3	**0.0202**	0.0100	0.00355	mg/L	05.24.13 01:18		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 01:18	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:18	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914283 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0127**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW28 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-001** | Date Collected: 05.15.13 09.40 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914402 | Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 14:07	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 14:07	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 14:07	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 14:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 20:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 20:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 20:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 20:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 20:24	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.20.13 20:24	U	
Total BTEX		ND		0.000500	mg/L	05.20.13 20:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	119	80 - 120	%		
4-Bromofluorobenzene	111	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW9 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-002** | Date Collected: 05.15.13 10.25 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**132**	10.0	0.280	mg/L	05.17.13 18:45		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1180**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 01:47	U	1
Chromium	7440-47-3	**0.0196**	0.0100	0.00355	mg/L	05.24.13 01:47		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 01:47	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:47	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914283 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0136**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW9 051513** | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-002** | Date Collected: 05.15.13 10.25 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 21:11	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 21:11	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 21:11	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 21:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	114	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:41	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:41	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:41	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:41	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:41	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 18:41	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 18:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	80 - 120	%		
4-Bromofluorobenzene	100	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW9A 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-003** | Date Collected: 05.15.13 11.40 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**524**	20.0	0.560	mg/L	05.17.13 19:07		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2080**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00949**	0.0200	0.00756	mg/L	05.24.13 01:53	J	1
Chromium	7440-47-3	**0.633**	0.0100	0.00355	mg/L	05.24.13 01:53		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 01:53	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:53	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914283 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.638**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW9A 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-003** | Date Collected: 05.15.13 11.40 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 21:36	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 21:36	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 21:36	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 21:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	109	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:57	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:57	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:57	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:57	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:57	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 18:57	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 18:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	80 - 120	%		
4-Bromofluorobenzene	83	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW60 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-004** | Date Collected: 05.15.13 09.50 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1140**	20.0	0.560	mg/L	05.17.13 19:29		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4310**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00865**	0.0200	0.00756	mg/L	05.24.13 02:10	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 02:10	U	1
Iron	7439-89-6	**0.275**	0.200	0.0188	mg/L	05.24.13 02:10		1
Manganese	7439-96-5	**2.10**	0.0200	0.00291	mg/L	05.24.13 02:10		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914283 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW60 051513** | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-004** | Date Collected: 05.15.13 09.50 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 22:02	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 22:02	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 22:02	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 22:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 19:13	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 19:13	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 19:13	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 19:13	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 19:13	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 19:13	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 19:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	107	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW95 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-005** | Date Collected: 05.15.13 11.30 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1510**	50.0	1.40	mg/L	05.17.13 19:50		50

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4630**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0130**	0.0200	0.00756	mg/L	05.24.13 02:16	J	1
Chromium	7440-47-3	**4.81**	0.0100	0.00355	mg/L	05.24.13 02:16		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:16	U	1
Manganese	7439-96-5	**0.0761**	0.0200	0.00291	mg/L	05.24.13 02:16		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914283 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**4.83**	0.100	0.0500	mg/L	05.16.13 08:55		10

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW95 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-005** | Date Collected: 05.15.13 11.30 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 22:27	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 22:27	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 22:27	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 22:27	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 19:30	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 19:30	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 19:30	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 19:30	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 19:30	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 19:30	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 19:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	109	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW89SA 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-006** | Date Collected: 05.15.13 13.40 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**102**	10.0	0.280	mg/L	05.17.13 22:00		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**831**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 02:22	U	1
Chromium	7440-47-3	**0.0381**	0.0100	0.00355	mg/L	05.24.13 02:22		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:22	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 02:22	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914283 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0299**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW89SA 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-006** | Date Collected: 05.15.13 13.40 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 22:52	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 22:52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 22:52	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 22:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 19:47	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 19:47	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 19:47	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 19:47	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 19:47	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 19:47	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 19:47	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW4 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-007** | Date Collected: 05.15.13 15.00 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**298**	10.0	0.280	mg/L	05.17.13 22:44		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1810**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 02:28	U	1
Chromium	7440-47-3	**0.123**	0.0100	0.00355	mg/L	05.24.13 02:28		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:28	U	1
Manganese	7439-96-5	**0.0134**	0.0200	0.00291	mg/L	05.24.13 02:28	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914286 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0998**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW4 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-007** | Date Collected: 05.15.13 15.00 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 23:17	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 23:17	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 23:17	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 23:17	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	108	70 - 135	%		
o-Terphenyl	118	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:03	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:03	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:03	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:03	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:03	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:03	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:03	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW4A 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-008** | Date Collected: 05.15.13 15.35 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**326**	10.0	0.280	mg/L	05.17.13 23:06		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1300**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0124**	0.0200	0.00756	mg/L	05.24.13 02:34	J	1
Chromium	7440-47-3	**0.00738**	0.0100	0.00355	mg/L	05.24.13 02:34	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:34	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 02:34	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914286 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW4A 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-008** | Date Collected: 05.15.13 15.35 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 23:43	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 23:43	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 23:43	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 23:43	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:19	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:19	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:19	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:19	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:19	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:19	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:19	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	91	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: DUP-4-051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-009** | Date Collected: 05.15.13 00.00 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**299**	20.0	0.560	mg/L	05.17.13 23:27		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2280**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 02:40	U	1
Chromium	7440-47-3	**0.399**	0.0100	0.00355	mg/L	05.24.13 02:40		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:40	U	1
Manganese	7439-96-5	**0.0125**	0.0200	0.00291	mg/L	05.24.13 02:40	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914286 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.395**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **DUP-4-051513** | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-009** | Date Collected: 05.15.13 00.00 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 00:08	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 00:08	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 00:08	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 00:08	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	105	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:36	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:36	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:36	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:36	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:36	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:36	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW37 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-010** | Date Collected: 05.15.13 17.10 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**343**	10.0	0.280	mg/L	05.17.13 23:49		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914097 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1540**	5.00	5.00	mg/L	05.17.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0228**	0.0200	0.00756	mg/L	05.24.13 02:46		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 02:46	U	1
Iron	7439-89-6	**0.650**	0.200	0.0188	mg/L	05.24.13 02:46		1
Manganese	7439-96-5	**0.0291**	0.0200	0.00291	mg/L	05.24.13 02:46		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914286 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0110**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW37 051513** | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-010** | Date Collected: 05.15.13 17.10 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	**7.09**	1.50	0.988	mg/L	05.22.13 05:25		1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**4.10**	1.50	0.988	mg/L	05.22.13 05:25		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 05:25	U	1
Total TPH	PHC635	**11.2**		0.988	mg/L	05.22.13 05:25		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	108	70 - 135	%		
o-Terphenyl	118	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**6.62**	0.0500	0.0250	mg/L	05.23.13 12:00		50
Toluene	108-88-3	ND	0.100	0.0500	mg/L	05.23.13 12:00	U	50
Ethylbenzene	100-41-4	**0.534**	0.0500	0.0350	mg/L	05.23.13 12:00		50
m,p-Xylenes	179601-23-1	**0.134**	0.100	0.0700	mg/L	05.23.13 12:00		50
o-Xylene	95-47-6	ND	0.0500	0.0350	mg/L	05.23.13 12:00	U	50
Total Xylenes	1330-20-7	**0.134**		0.0350	mg/L	05.23.13 12:00		
Total BTEX		**7.29**		0.0250	mg/L	05.23.13 12:00		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	113	80 - 120	%		
4-Bromofluorobenzene	109	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW94 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-011** | Date Collected: 05.15.13 16.05 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**297**	20.0	0.560	mg/L	05.18.13 00:11		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2400**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00923**	0.0200	0.00756	mg/L	05.24.13 02:52	J	1
Chromium	7440-47-3	**0.402**	0.0100	0.00355	mg/L	05.24.13 02:52		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:52	U	1
Manganese	7439-96-5	**0.0143**	0.0200	0.00291	mg/L	05.24.13 02:52	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914286 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.385**	0.0100	0.00500	mg/L	05.16.13 08:55		1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW94 051513** | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-011** | Date Collected: 05.15.13 16.05 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 00:33	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 00:33	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 00:33	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 00:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	107	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 20:52	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 20:52	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 20:52	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 20:52	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 20:52	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 20:52	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 20:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	103	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW68 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-012** | Date Collected: 05.15.13 14.15 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**120**	5.00	0.140	mg/L	05.18.13 00:32		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**820**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0113**	0.0200	0.00756	mg/L	05.24.13 02:58	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 02:58	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 02:58	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 02:58	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914286 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW68 051513** | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-012** | Date Collected: 05.15.13 14.15 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914269 | Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.22.13 01:24	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.22.13 01:24	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.22.13 01:24	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.22.13 01:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	97	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 21:09	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 21:09	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 21:09	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 21:09	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 21:09	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 21:09	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 21:09	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	80 - 120	%		
4-Bromofluorobenzene	104	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW61 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-013** | Date Collected: 05.15.13 17.45 | Date Received: 05.16.13 09.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**554**	20.0	0.560	mg/L	05.18.13 00:54		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2550**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0232**	0.0200	0.00756	mg/L	05.24.13 03:04		1
Chromium	7440-47-3	**3.84**	0.0100	0.00355	mg/L	05.24.13 03:04		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.24.13 03:04	U	1
Manganese	7439-96-5	**0.00544**	0.0200	0.00291	mg/L	05.24.13 03:04	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914286 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**3.82**	0.100	0.0500	mg/L	05.16.13 08:55		10

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW61 051513 | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-013** | Date Collected: 05.15.13 17.45 | Date Received: 05.16.13 09.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 15:26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 15:26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 15:26	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 15:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 21:41	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 21:41	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 21:41	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 21:41	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 21:41	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 21:41	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 21:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: TRIP BLANK | Matrix: Water | Sample Depth:

Lab Sample Id: **463245-014** | Date Collected: 05.15.13 00.00 | Date Received: 05.16.13 09.40

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 21:57	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 21:57	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 21:57	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 21:57	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 21:57	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 21:57	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 21:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	81	80 - 120	%		
4-Bromofluorobenzene	96	80 - 120	%		

Sample Id: 638382-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638382-1-BLK** | Date Collected: | Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914154 | Date Prep: 05.16.13 10.00

Prep seq: 638382

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.17.13 06:26	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638383-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638383-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914155 | Date Prep: 05.20.13 17.00

Prep seq: 638383

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.20.13 20:08	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.20.13 20:08	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.20.13 20:08	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.20.13 20:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	81	80 - 120	%		
4-Bromofluorobenzene	118	80 - 120	%		

Sample Id: 638385-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638385-1-BLK** | Date Collected: | Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914158 | Date Prep: 05.17.13 10.00

Prep seq: 638385

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.17.13 20:55	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638441-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638441-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914269 Date Prep: 05.21.13 15.30

Prep seq: 638441

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.21.13 20:20	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.21.13 20:20	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.21.13 20:20	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.21.13 20:20	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	95	70 - 135	%		
o-Terphenyl	104	70 - 135	%		

Sample Id: 638442-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638442-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914402 Date Prep: 05.20.13 14.00

Prep seq: 638442

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 05:04	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 05:04	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	109	70 - 135	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638464-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638464-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	117	80 - 120	%		

Sample Id: 638552-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638552-1-BLK** | Date Collected: | Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914600 | Date Prep: 05.23.13 11.30

Subcontractor: SUB: E871002 | Prep seq: 638552

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.24.13 01:00	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.24.13 01:00	U	1
Iron	7439-89-6	**0.0282**	0.200	0.0188	mg/L	05.24.13 01:00	J	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.24.13 01:00	U	1

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638611-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638611-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** Prep Method: 5030B

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914531 Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 11:44	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 11:44	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 11:44	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	116	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Sample Id: 638628-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638628-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914553 Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 14:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results 463245

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 914097-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914097-1-BLK** Date Collected: Date Received:

Analytical Method: **TDS by SM2540C** Prep Method:

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914097 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.17.13 11:00	U	1

Sample Id: 914283-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914283-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914283 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Sample Id: 914286-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914286-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914286 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.16.13 08:55	U	1

Sample Id: 914558-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914558-1-BLK** Date Collected: Date Received:

Analytical Method: **TDS by SM2540C** Prep Method:

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914558 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.21.13 10:00	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914155 **Sample:** 638383-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 19:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 914155 **Sample:** 463245-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/13 20:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 914155 **Sample:** 638383-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 08:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914299 **Sample:** 638464-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 17:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914531 **Sample:** 638611-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 13:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0353	0.0300	118	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914269 **Sample:** 638441-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 19:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.9	10.0	109	70-135	
o-Terphenyl	3.92	5.00	78	70-135	

Lab Batch #: 914269 **Sample:** 638441-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 19:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.0	10.0	110	70-135	
o-Terphenyl	3.94	5.00	79	70-135	

Lab Batch #: 914269 **Sample:** 638441-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 20:20

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.52	10.0	95	70-135	
o-Terphenyl	5.19	5.00	104	70-135	

Lab Batch #: 914269 **Sample:** 463245-002 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 04:59

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.3	10.0	113	70-135	
o-Terphenyl	4.00	5.00	80	70-135	

Lab Batch #: 914402 **Sample:** 463050-012 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 14:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.69	10.0	97	70-135	
o-Terphenyl	3.99	5.00	80	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914402 **Sample:** 638442-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.4	10.0	104	70-135	
o-Terphenyl	4.19	5.00	84	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 04:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	4.09	5.00	82	70-135	

Lab Batch #: 914402 **Sample:** 638442-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 05:04

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.1	10.0	101	70-135	
o-Terphenyl	5.44	5.00	109	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 12:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	10.0	121	70-135	
o-Terphenyl	5.98	5.00	120	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463245, **Project ID:** 073018

Lab Batch #: 914553 **Sample:** 638628-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.06	5.00	121	70-135	

Lab Batch #: 914553 **Sample:** 463335-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 21:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.33	5.00	127	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Lab Batch #: 914283 **Sample:** 914283-1-BKS **Matrix:** Water
Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0228	91	80-120	

Lab Batch #: 914286 **Sample:** 914286-1-BKS **Matrix:** Water
Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0215	86	80-120	

Lab Batch #: 914097 **Sample:** 914097-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	1070	107	80-120	

Lab Batch #: 914558 **Sample:** 914558-1-BKS **Matrix:** Water
Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	977	98	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Version: 1.%

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914155 **Sample:** 638383-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.108	108	0.100	0.113	113	5	70-125	25	
Toluene	<0.00100	0.100	0.118	118	0.100	0.120	120	2	70-125	25	
Ethylbenzene	<0.000700	0.100	0.119	119	0.100	0.119	119	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.238	119	0.200	0.231	116	3	70-131	25	
o-Xylene	<0.000700	0.100	0.118	118	0.100	0.114	114	3	71-133	25	

Analyst: DYV **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914299 **Sample:** 638464-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0977	98	0.100	0.102	102	4	70-125	25	
Toluene	<0.00100	0.100	0.105	105	0.100	0.106	106	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.114	114	0.100	0.111	111	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.209	105	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0991	99	0.100	0.107	107	8	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914531 **Sample:** 638611-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0931	93	0.100	0.0967	97	4	70-125	25	
Toluene	<0.00100	0.100	0.119	119	0.100	0.105	105	13	70-125	25	
Ethylbenzene	<0.000700	0.100	0.118	118	0.100	0.113	113	4	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.228	114	0.200	0.216	108	5	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.105	105	3	71-133	25	

Analyst: KUG **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/24/2013

Lab Batch ID: 914600 **Sample:** 638552-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.974	97	1.00	0.993	99	2	80-120	20	
Chromium	<0.00355	1.00	1.01	101	1.00	1.03	103	2	80-120	20	
Iron	0.0282	5.00	4.63	93	5.00	4.64	93	0	80-120	20	
Manganese	<0.00291	1.00	0.893	89	1.00	0.909	91	2	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: AMB **Date Prepared:** 05/16/2013 **Date Analyzed:** 05/17/2013

Lab Batch ID: 914154 **Sample:** 638382-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.5	102	25.0	25.7	103	1	80-120	20	

Analyst: AMB **Date Prepared:** 05/17/2013 **Date Analyzed:** 05/17/2013

Lab Batch ID: 914158 **Sample:** 638385-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.6	102	25.0	25.6	102	0	80-120	20	

Analyst: DYV **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914269 **Sample:** 638441-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	101	101	100	102	102	1	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	107	107	100	108	108	1	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463245 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/20/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914402 **Sample:** 638442-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	107	107	100	104	104	3	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	112	112	100	109	109	3	70-135	25	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914553 **Sample:** 638628-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	109	109	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	115	115	100	112	112	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463245

Lab Batch #: 914154 **Project ID:** 073018

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463058-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	20.9	50.0	72.9	104	80-120	

Lab Batch #: 914154

Date Analyzed: 05/17/2013 **Date Prepared:** 05/16/2013 **Analyst:** AMB

QC- Sample ID: 463148-010 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	46.8	125	183	109	80-120	

Lab Batch #: 914158

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB

QC- Sample ID: 463245-006 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	102	250	379	111	80-120	

Lab Batch #: 914269

Date Analyzed: 05/22/2013 **Date Prepared:** 05/21/2013 **Analyst:** DYV

QC- Sample ID: 463245-002 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	102	102	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	107	107	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Version: 1.%

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463245
Lab Batch #: 914402 **Project ID:** 073018
Date Analyzed: 05/22/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV
QC- Sample ID: 463050-012 S **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	99.3	99	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	108	108	70-135	

Lab Batch #: 914553
Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV
QC- Sample ID: 463335-003 S **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	106	106	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	114	114	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463245 **Project ID:** 073018

Lab Batch ID: 914155 **QC- Sample ID:** 463245-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/20/2013 **Date Prepared:** 05/20/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.102	102	0.100	0.0948	95	7	70-125	25	
Toluene	<0.00100	0.100	0.106	106	0.100	0.107	107	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.109	109	0.100	0.109	109	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.203	102	0.200	0.208	104	2	70-131	25	
o-Xylene	<0.000700	0.100	0.0997	100	0.100	0.0982	98	2	71-133	25	

Lab Batch ID: 914299 **QC- Sample ID:** 463245-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0956	96	0.100	0.108	108	12	70-125	25	
Toluene	<0.00100	0.100	0.108	108	0.100	0.102	102	6	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.117	117	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.216	108	2	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.112	112	4	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463245 **Project ID:** 073018

Lab Batch ID: 914531 **QC- Sample ID:** 463584-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.111	111	0.100	0.105	105	6	70-125	25	
Toluene	<0.00100	0.100	0.111	111	0.100	0.112	112	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.119	119	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.224	112	0.200	0.221	111	1	70-131	25	
o-Xylene	<0.000700	0.100	0.111	111	0.100	0.106	106	5	71-133	25	

Lab Batch ID: 914283 **QC- Sample ID:** 463219-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.207	0.250	0.449	97	0.250	0.455	99	1	80-120	20	

Lab Batch ID: 914286 **QC- Sample ID:** 463245-007 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/16/2013 **Date Prepared:** 05/16/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.0998	0.250	0.345	98	0.250	0.343	97	1	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463245 **Project ID:** 073018

Lab Batch ID: 914600 **QC- Sample ID:** 463245-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/24/2013 **Date Prepared:** 05/23/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.0110	1.00	1.02	101	1.00	0.964	95	6	75-125	20	
Chromium	0.0202	1.00	1.02	100	1.00	0.953	93	7	75-125	20	
Iron	<0.0188	5.00	4.31	86	5.00	4.07	81	6	75-125	20	
Manganese	<0.00291	1.00	0.874	87	1.00	0.830	83	5	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463245

Lab Batch #: 914283 **Project ID:** 073018
Date Analyzed: 05/16/2013 08:55 **Date Prepared:** 05/16/2013 **Analyst:** WRU
QC- Sample ID: 463219-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	0.207	0.207	0	20	

Lab Batch #: 914286
Date Analyzed: 05/16/2013 08:55 **Date Prepared:** 05/16/2013 **Analyst:** WRU
QC- Sample ID: 463245-007 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	0.0998	0.0998	0	20	

Lab Batch #: 914097
Date Analyzed: 05/17/2013 11:00 **Date Prepared:** 05/17/2013 **Analyst:** AMB
QC- Sample ID: 462925-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2800	2980	6	30	

Lab Batch #: 914097
Date Analyzed: 05/17/2013 11:00 **Date Prepared:** 05/17/2013 **Analyst:** AMB
QC- Sample ID: 463245-010 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	1540	1550	1	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Version: 1.%

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463245

Lab Batch #: 914558 **Project ID:** 073018
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463245-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2400	2540	6	30	

Lab Batch #: 914558
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463335-008 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	440	448	2	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Version: 1.%

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322926 Page of

Company-City: CRA-Midland
Phone: 432-686-0086
Lab Only: 463245

Project Name-Location: N Eunice ☐ Previously done at XENCO
Project ID: 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other
Proj. Manager (PM): Mike Wisniewiecki
E-mail Results to ☒ PM and
Fax No: 432-686-0086

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Justin Nixon **Signature:** [signature]

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021B BTEX	Diss Metals method 6010B	TDS SM 2540 C	Chlorides E300	TPH GRO + DRO 8015 mod	Hex Chrome 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	Jw28 051513	5-15-13	940		W		X	7													X	X	X	X	X	X											1
2	mw9 051513	↓	1025		↓		↓	↓													↓	↓	↓	↓	↓	↓											2
3	mw9A 051513		1140																																		3
4	mw60 051513		950																																		4
5	mw95 051513		1130																																		5
6	mw89S4 051513		1340																																		6
7	mw4 051513		1500																																		7
8	mw4A 051513		1535																																		8
9	Dup4 051513		—																																		9
10	mw37 051513		1710																																		10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) [signature]	5/15/13 1825	2) SHOICHI KOJIMA	5/15/13 18:23
3)		4) [signature]	5-16-13 9:40
5)		6)	

Total Containers per COC: 7 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322927 Page 2 of 2

Company-City CRA, Midland **Phone** 432-686-0086

Lab Only: 463245

Project Name-Location NEWIE ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)** Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0180

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals method 6010B	TDS SM 2540 c	Chlorides E300	TPH Grof DRO 8015 mod	Hex Chrome 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW4 051513	5-15-13	1605		W		X	7													X	X	X	X	X	X											1
2	MW8 051513	↓	1415		↓		↓	↓													↓	↓	↓	↓	↓	↓											2
3	MW1 051513	↓	1745		↓		↓	↓													↓	↓	↓	↓	↓	↓											3
4	Trip Blank	↓	—					2													↓	↓	↓	↓	↓	↓											4
5																																					5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1)	5/15/13 1825	2) SHOICHI KOJIMA	5/15/13 18:23
2	3)		4)	
3	5)		6)	

Total Containers per COC: 9 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/16/2013 09:40:00 AM

Work Order #: 463245

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/17/2013

Checklist reviewed by: Kelsey Brooks Date: 05/17/2013

Analytical Report 463335

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

28-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

28-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463335**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463335. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463335 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW3 051613	W	05-16-13 10:10		463335-001
MW7A 051613	W	05-16-13 10:45		463335-002
MW7 051613	W	05-16-13 12:00		463335-003
MW8 051613	W	05-16-13 15:05		463335-004
MW8A 051613	W	05-16-13 16:10		463335-005
MW87A 051613	W	05-16-13 17:00		463335-006
MW25 051613	W	05-16-13 09:50		463335-007
MW14A 051613	W	05-16-13 10:45		463335-008
MW14 051613	W	05-16-13 12:15		463335-009
MW15 051613	W	05-16-13 14:55		463335-010
MW15A 051613	W	05-16-13 16:10		463335-011
MW16 051613	W	05-16-13 17:25		463335-012
TRIP BLANK	W	05-16-13 00:00		463335-013

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*28-MAY-13*
Work Order Number(s):	*463335*	Date Received:	*05/17/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-914162 Inorganic Anions by EPA 300/300.1
E300

Batch 914162, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 463335-001, -002, -003, -009, -007, -006, -011, -012, -008, -005, -004, -010.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

E300

Batch 914162, Chloride detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463335-001, -002, -003, -009, -007, -006, -011, -012, -008, -005, -004, -010.

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*28-MAY-13*
Work Order Number(s):	*463335*	Date Received:	*05/17/2013*

Batch: LBA-914287 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914287, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463335-001, -002, -003, -009, -007, -006, -008, -005, -004, -010.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Batch: LBA-914296 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914296, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463335-011, -012.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW3 051613** Matrix: Water Sample Depth:

Lab Sample Id: **463335-001** Date Collected: 05.16.13 10.10 Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**45.7**	10.0	0.280	mg/L	05.18.13 09:35		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1040**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0213**	0.0200	0.00756	mg/L	05.25.13 13:40		1
Chromium	7440-47-3	**0.0174**	0.0100	0.00355	mg/L	05.25.13 13:40		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 13:40	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 13:40	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0160**	0.0100	0.00500	mg/L	05.17.13 09:40	X	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW3 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-001**	Date Collected: 05.16.13 10.10	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 15:56	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 15:56	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 15:56	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 15:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:24	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 10:24	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 10:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	111	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW7A 051613** Matrix: Water Sample Depth:

Lab Sample Id: **463335-002** Date Collected: 05.16.13 10.45 Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**344**	10.0	0.280	mg/L	05.18.13 09:57		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1600**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0231**	0.0200	0.00756	mg/L	05.25.13 13:46		1
Chromium	7440-47-3	**0.275**	0.0100	0.00355	mg/L	05.25.13 13:46		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 13:46	U	1
Manganese	7439-96-5	**0.00660**	0.0200	0.00291	mg/L	05.25.13 13:46	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.265**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW7A 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-002**	Date Collected: 05.16.13 10.45	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 16:25	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 16:25	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 16:25	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 16:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:40	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:40	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:40	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:40	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:40	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 10:40	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 10:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	110	80 - 120	%		
4-Bromofluorobenzene	83	80 - 120	%		

Final 1.000

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW7 051613** Matrix: Water Sample Depth:

Lab Sample Id: **463335-003** Date Collected: 05.16.13 12.00 Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**173**	10.0	0.280	mg/L	05.18.13 10:18		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1220**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0255**	0.0200	0.00756	mg/L	05.25.13 13:52		1
Chromium	7440-47-3	**0.0210**	0.0100	0.00355	mg/L	05.25.13 13:52		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 13:52	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 13:52	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0187**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW7 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-003**	Date Collected: 05.16.13 12.00	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 16:54	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 16:54	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 16:54	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 16:54	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:56	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:56	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:56	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:56	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 10:56	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 10:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW8 051613**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463335-004**	Date Collected: 05.16.13 15.05		Date Received: 05.17.13 09.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.17.13 10.00	Tech:	AMB
Seq Number:	914162	Prep seq:	638386		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**839**	20.0	0.560	mg/L	05.18.13 10:40		20

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914558	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3760**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.24.13 16.35	Tech:	KUG
Seq Number:	914659	Prep seq:	638658		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 13:58	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 13:58	U	1
Iron	7439-89-6	**0.0712**	0.200	0.0188	mg/L	05.25.13 13:58	J	1
Manganese	7439-96-5	**0.871**	0.0200	0.00291	mg/L	05.25.13 13:58		1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914287	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW8 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-004**	Date Collected: 05.16.13 15.05	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 17:22	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 17:22	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 17:22	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 17:22	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	114	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 11:12	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 11:12	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 11:12	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 11:12	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 11:12	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 11:12	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 11:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	108	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW8A 051613** Matrix: Water Sample Depth:

Lab Sample Id: **463335-005** Date Collected: 05.16.13 16.10 Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**793**	20.0	0.560	mg/L	05.18.13 11:02		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4850**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0802**	0.0200	0.00756	mg/L	05.25.13 14:04		1
Chromium	7440-47-3	**0.0863**	0.0100	0.00355	mg/L	05.25.13 14:04		1
Iron	7439-89-6	**4.62**	0.200	0.0188	mg/L	05.25.13 14:04		1
Manganese	7439-96-5	**0.156**	0.0200	0.00291	mg/L	05.25.13 14:04		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0141**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW8A 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-005**	Date Collected: 05.16.13 16.10	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 17:50	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 17:50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 17:50	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 17:50	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 14:56	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 14:56	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 14:56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 14:56	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 14:56	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 14:56	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 14:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW87A 051613**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463335-006**	Date Collected: 05.16.13 17.00		Date Received: 05.17.13 09.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.17.13 10.00	Tech:	AMB
Seq Number:	914162	Prep seq:	638386		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1120**	20.0	0.560	mg/L	05.18.13 12:07		20

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914558	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2450**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.24.13 16.35	Tech:	KUG
Seq Number:	914659	Prep seq:	638658		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0201**	0.0200	0.00756	mg/L	05.25.13 14:10		1
Chromium	7440-47-3	**0.0596**	0.0100	0.00355	mg/L	05.25.13 14:10		1
Iron	7439-89-6	**0.661**	0.200	0.0188	mg/L	05.25.13 14:10		1
Manganese	7439-96-5	**0.0851**	0.0200	0.00291	mg/L	05.25.13 14:10		1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914287	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0162**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW87A 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-006**	Date Collected: 05.16.13 17.00	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 18:18	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 18:18	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 18:18	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 18:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	114	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 15:11	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 15:11	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 15:11	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 15:11	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 15:11	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 15:11	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 15:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	88	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW25 051613** Matrix: Water Sample Depth:

Lab Sample Id: **463335-007** Date Collected: 05.16.13 09.50 Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**265**	10.0	0.280	mg/L	05.18.13 12:29		10

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1400**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0105**	0.0200	0.00756	mg/L	05.25.13 14:16	J	1
Chromium	7440-47-3	**0.00547**	0.0100	0.00355	mg/L	05.25.13 14:16	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:16	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 14:16	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW25 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-007**	Date Collected: 05.16.13 09.50	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 18:44	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 18:44	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 18:44	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 18:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	107	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 11:28	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 11:28	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 11:28	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 11:28	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 11:28	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 11:28	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 11:28	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	80 - 120	%		
4-Bromofluorobenzene	80	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW14A 051613** Matrix: Water Sample Depth:

Lab Sample Id: **463335-008** Date Collected: 05.16.13 10.45 Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**46.0**	5.00	0.140	mg/L	05.18.13 12:50		5

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**440**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0198**	0.0200	0.00756	mg/L	05.25.13 14:22	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 14:22	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:22	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 14:22	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW14A 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-008**	Date Collected: 05.16.13 10.45	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 19:10	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 19:10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 19:10	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 19:10	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 11:44	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 11:44	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 11:44	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 11:44	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 11:44	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 11:44	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 11:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	116	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW14 051613**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463335-009**	Date Collected: 05.16.13 12.15		Date Received: 05.17.13 09.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.17.13 10.00	Tech:	AMB
Seq Number:	914162	Prep seq:	638386		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1540**	20.0	0.560	mg/L	05.18.13 13:12		20

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914558	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3820**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.24.13 16.35	Tech:	KUG
Seq Number:	914659	Prep seq:	638658		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0247**	0.0200	0.00756	mg/L	05.25.13 14:28		1
Chromium	7440-47-3	**0.0245**	0.0100	0.00355	mg/L	05.25.13 14:28		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:28	U	1
Manganese	7439-96-5	**0.128**	0.0200	0.00291	mg/L	05.25.13 14:28		1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914287	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0172**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW14 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-009**	Date Collected: 05.16.13 12.15	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 19:35	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 19:35	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 19:35	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 19:35	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:00	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:00	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:00	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:00	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:00	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:00	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:00	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	80 - 120	%		
4-Bromofluorobenzene	80	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW15 051613** Matrix: Water Sample Depth:

Lab Sample Id: **463335-010** Date Collected: 05.16.13 14.55 Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**532**	20.0	0.560	mg/L	05.18.13 13:34		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914558 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2050**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0173**	0.0200	0.00756	mg/L	05.25.13 14:34	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 14:34	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:34	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 14:34	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW15 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-010**	Date Collected: 05.16.13 14.55	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 20:26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 20:26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 20:26	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 20:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:16	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:16	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:16	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:16	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:16	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:16	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:16	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	110	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW15A 051613**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463335-011**	Date Collected: 05.16.13 16.10		Date Received: 05.17.13 09.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.17.13 10.00	Tech:	AMB
Seq Number:	914162	Prep seq:	638386		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1410**	20.0	0.560	mg/L	05.18.13 14:17		20

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914558	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3400**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.24.13 16.35	Tech:	KUG
Seq Number:	914659	Prep seq:	638658		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00913**	0.0200	0.00756	mg/L	05.25.13 14:51	J	1
Chromium	7440-47-3	**0.00502**	0.0100	0.00355	mg/L	05.25.13 14:51	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:51	U	1
Manganese	7439-96-5	**0.00770**	0.0200	0.00291	mg/L	05.25.13 14:51	J	1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914296	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	UX	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW15A 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-011**	Date Collected: 05.16.13 16.10	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 20:53	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 20:53	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 20:53	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 20:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	107	70 - 135	%		
o-Terphenyl	117	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:32	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:32	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:32	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:32	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:32	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:32	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	80	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW16 051613**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463335-012**	Date Collected: 05.16.13 17.25		Date Received: 05.17.13 09.50	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.17.13 10.00	Tech:	AMB
Seq Number:	914162	Prep seq:	638386		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**250**	10.0	0.280	mg/L	05.18.13 14:39		10

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914558	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**909**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.24.13 16.35	Tech:	KUG
Seq Number:	914659	Prep seq:	638658		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0153**	0.0200	0.00756	mg/L	05.25.13 14:58	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 14:58	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:58	U	1
Manganese	7439-96-5	**0.00528**	0.0200	0.00291	mg/L	05.25.13 14:58	J	1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914296	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW16 051613**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463335-012**	Date Collected: 05.16.13 17.25	Date Received: 05.17.13 09.50

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 21:18	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 21:18	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 21:18	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 21:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.21.13 08.30	Tech:	KEB
Seq Number:	914275	Prep seq:	638417		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 14:40	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 14:40	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 14:40	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 14:40	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 14:40	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 14:40	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 14:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **TRIP BLANK** Matrix: Water Sample Depth:

Lab Sample Id: **463335-013** Date Collected: 05.16.13 00.00 Date Received: 05.17.13 09.50

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: KEB Date Prep: 05.21.13 08.30 Tech: KEB

Seq Number: 914275 Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:48	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:48	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:48	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:48	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:48	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:48	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:48	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Sample Id: **638386-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638386-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.17.13 10.00 Tech: AMB

Seq Number: 914162 Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**0.553**	1.00	0.0280	mg/L	05.18.13 07:47	J	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638417-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638417-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: KEB Date Prep: 05.21.13 08.30 Tech: KEB

Seq Number: 914275 Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:08	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:08	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:08	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:08	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	84	80 - 120	%		

Sample Id: **638628-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638628-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** % Moist: Prep Method: 1005

Analyst: DYV Date Prep: 05.23.13 11.00 Tech: DYV

Seq Number: 914553 Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 14:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638658-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638658-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 12:30	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 12:30	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 12:30	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 12:30	U	1

Sample Id: **914287-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914287-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914287 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Sample Id: **914296-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914296-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914296 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**914558-1-BLK**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**914558-1-BLK**	Date Collected:		Date Received:	

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914558	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.21.13 10:00	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463335, **Project ID:** 073018

Lab Batch #: 914275 **Sample:** 638417-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 09:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914275 **Sample:** 638417-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 09:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 914275 **Sample:** 638417-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 10:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 914275 **Sample:** 463335-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 13:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 914275 **Sample:** 463335-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 13:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463335, **Project ID:** 073018

Lab Batch #: 914553 **Sample:** 638628-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 12:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	10.0	121	70-135	
o-Terphenyl	5.98	5.00	120	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.06	5.00	121	70-135	

Lab Batch #: 914553 **Sample:** 463335-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 21:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.33	5.00	127	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463335 **Project ID:** 073018

Lab Batch #: 914287 **Sample:** 914287-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0216	86	80-120	

Lab Batch #: 914296 **Sample:** 914296-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0215	86	80-120	

Lab Batch #: 914558 **Sample:** 914558-1-BKS **Matrix:** Water
Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	977	98	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463335 **Project ID:** 073018

Analyst: KEB **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914275 **Sample:** 638417-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0959	96	0.100	0.0986	99	3	70-125	25	
Toluene	<0.00100	0.100	0.0838	84	0.100	0.0850	85	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0792	79	0.100	0.0796	80	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.155	78	0.200	0.156	78	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0812	81	0.100	0.0813	81	0	71-133	25	

Analyst: KUG **Date Prepared:** 05/24/2013 **Date Analyzed:** 05/25/2013

Lab Batch ID: 914659 **Sample:** 638658-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.966	97	1.00	0.940	94	3	80-120	20	
Chromium	<0.00355	1.00	0.984	98	1.00	0.950	95	4	80-120	20	
Iron	<0.0188	5.00	4.85	97	5.00	4.66	93	4	80-120	20	
Manganese	<0.00291	1.00	0.893	89	1.00	0.863	86	3	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463335 **Project ID:** 073018

Analyst: AMB **Date Prepared:** 05/17/2013 **Date Analyzed:** 05/18/2013

Lab Batch ID: 914162 **Sample:** 638386-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	0.553	25.0	25.7	103	25.0	25.9	104	1	80-120	20	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914553 **Sample:** 638628-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	109	109	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	115	115	100	112	112	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463335

Lab Batch #: 914162 **Project ID:** 073018

Date Analyzed: 05/18/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB

QC- Sample ID: 463185-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	205	125	358	122	80-120	X

Lab Batch #: 914162

Date Analyzed: 05/18/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB

QC- Sample ID: 463335-010 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	532	500	1080	110	80-120	

Lab Batch #: 914553

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

QC- Sample ID: 463335-003 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	106	106	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	114	114	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463335 **Project ID:** 073018

Lab Batch ID: 914275 **QC- Sample ID:** 463335-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** KEB

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.102	102	0.100	0.103	103	1	70-125	25	
Toluene	<0.00100	0.100	0.0891	89	0.100	0.0889	89	0	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0844	84	0.100	0.0841	84	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.165	83	0.200	0.165	83	0	70-131	25	
o-Xylene	<0.000700	0.100	0.0864	86	0.100	0.0857	86	1	71-133	25	

Lab Batch ID: 914287 **QC- Sample ID:** 463335-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.0160	0.250	0.260	98	0.200	0.266	125	2	80-120	20	X

Lab Batch ID: 914296 **QC- Sample ID:** 463335-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.244	98	0.200	0.243	122	0	80-120	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463335 **Project ID:** 073018

Lab Batch ID: 914659 **QC- Sample ID:** 463326-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/25/2013 **Date Prepared:** 05/24/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.00855	1.00	1.02	101	1.00	1.02	101	0	75-125	20	
Chromium	<0.00355	1.00	0.966	97	1.00	0.960	96	1	75-125	20	
Iron	0.214	5.00	4.96	95	5.00	4.93	94	1	75-125	20	
Manganese	0.0468	1.00	0.917	87	1.00	0.911	86	1	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463335

Lab Batch #: 914287 **Project ID:** 073018
Date Analyzed: 05/17/2013 09:40 **Date Prepared:** 05/17/2013 **Analyst:** WRU
QC- Sample ID: 463335-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	0.0160	0.0160	0	20	

Lab Batch #: 914296
Date Analyzed: 05/17/2013 09:40 **Date Prepared:** 05/17/2013 **Analyst:** WRU
QC- Sample ID: 463335-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914558
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463245-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2400	2540	6	30	

Lab Batch #: 914558
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463335-008 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	440	448	2	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322813 Page 1 of 2

Company-City CRA - Midland **Phone** 432-686-0086

Lab Only: 463335

Project Name-Location N Eunice ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)** Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0186

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	method 8021 B BTEX	Diss metals method 6010B	TDS Sm 2540 C	Chlorides E300	TPH Grot DRO 8015 mod	Hex chrome 7196A				TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:
1	MW3051613	5-16-13	1010		W		X	7													X	X	X	X	X	X										1
2	MW7405 1613		1045																																	2
3	MW7 051613		1200																																	3
4	MW8 051613		1505																																	4
5	MW8A051613		1610																																	5
6	MW87A051613		1700																																	6
7	MW25051613		950																																	7
8	MW14A051613		1045																																	8
9	MW14051613		1215																																	9
10	MW15051613		1455																																	10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1)	5-16-13 1835	2)	5/16/13
2) 3)		4)	18:13
3) 5)		6)	5/17/13 9:50

Total Containers per COC: 7 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

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☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322812 Page 2 of 2

Company-City CRA-Midland **Phone** 432-686-0086

Lab Only: 463335

Project Name-Location N Emile ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0180

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	method 8021 BTEX	Diss metals 6010B	TDS SM2540C	Chlorides E300	TPH Geo + Deo 8015 mod	Hex Chrome 7196A				TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW15A051613	5-16-13	1610		W		X	7													X	X	X	X	X	X											1
2	MW16051613	↓	1725																		↓	↓	↓	↓	↓	↓											2
3	Trip Blank																																				3
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7																																					7
8																																					8
9																																					9
10																																					10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) [signature]	5-16-13 1835	2) SWORCH Collins	5/16/13
2	3)		4)	18:42
3	5)		6)	

Total Containers per COC: 7 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/17/2013 09:50:00 AM

Work Order #: 463335

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/17/2013

Checklist reviewed by: Kelsey Brooks Date: 05/17/2013

Analytical Report 463335

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

31-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

31-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463335**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463335. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463335 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW3 051613	W	05-16-13 10:10		463335-001
MW7A 051613	W	05-16-13 10:45		463335-002
MW7 051613	W	05-16-13 12:00		463335-003
MW8 051613	W	05-16-13 15:05		463335-004
MW8A 051613	W	05-16-13 16:10		463335-005
MW87A 051613	W	05-16-13 17:00		463335-006
MW25 051613	W	05-16-13 09:50		463335-007
MW14A 051613	W	05-16-13 10:45		463335-008
MW14 051613	W	05-16-13 12:15		463335-009
MW15 051613	W	05-16-13 14:55		463335-010
MW15A 051613	W	05-16-13 16:10		463335-011
MW16 051613	W	05-16-13 17:25		463335-012
TRIP BLANK	W	05-16-13 00:00		463335-013

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*31-MAY-13*
Work Order Number(s):	*463335*	Date Received:	*05/17/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-914162 Inorganic Anions by EPA 300/300.1
E300

Batch 914162, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 463335-001, -002, -003, -009, -007, -006, -011, -012, -008, -005, -004, -010.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

E300

Batch 914162, Chloride detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463335-001, -002, -003, -009, -007, -006, -011, -012, -008, -005, -004, -010.

Batch: LBA-914287 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914287, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463335-001, -002, -003, -009, -007, -006, -008, -005, -004, -010.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Batch: LBA-914296 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914296, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463335-011, -012.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW3 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-001** | Date Collected: 05.16.13 10.10 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**45.7**	10.0	0.280	mg/L	05.18.13 09:35		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1040**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0213**	0.0200	0.00756	mg/L	05.25.13 13:40		1
Chromium	7440-47-3	**0.0174**	0.0100	0.00355	mg/L	05.25.13 13:40		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 13:40	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 13:40	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0160**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW3 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-001** | Date Collected: 05.16.13 10.10 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 15:56	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 15:56	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 15:56	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 15:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:24	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 10:24	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 10:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	111	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW7A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-002** | Date Collected: 05.16.13 10.45 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**344**	10.0	0.280	mg/L	05.18.13 09:57		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1600**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0231**	0.0200	0.00756	mg/L	05.25.13 13:46		1
Chromium	7440-47-3	**0.275**	0.0100	0.00355	mg/L	05.25.13 13:46		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 13:46	U	1
Manganese	7439-96-5	**0.00660**	0.0200	0.00291	mg/L	05.25.13 13:46	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.265**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW7A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-002** | Date Collected: 05.16.13 10.45 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 16:25	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 16:25	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 16:25	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 16:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	113	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:40	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:40	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:40	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:40	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:40	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 10:40	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 10:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	110	80 - 120	%		
4-Bromofluorobenzene	83	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW7 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-003** | Date Collected: 05.16.13 12.00 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**173**	10.0	0.280	mg/L	05.18.13 10:18		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1220**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0255**	0.0200	0.00756	mg/L	05.25.13 13:52		1
Chromium	7440-47-3	**0.0210**	0.0100	0.00355	mg/L	05.25.13 13:52		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 13:52	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 13:52	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0187**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW7 051613** | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-003** | Date Collected: 05.16.13 12.00 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 16:54	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 16:54	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 16:54	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 16:54	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:56	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:56	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:56	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:56	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 10:56	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 10:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW8 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-004** | Date Collected: 05.16.13 15.05 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**839**	20.0	0.560	mg/L	05.18.13 10:40		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3760**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 13:58	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 13:58	U	1
Iron	7439-89-6	**0.0712**	0.200	0.0188	mg/L	05.25.13 13:58	J	1
Manganese	7439-96-5	**0.871**	0.0200	0.00291	mg/L	05.25.13 13:58		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW8 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-004** | Date Collected: 05.16.13 15.05 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 17:22	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 17:22	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 17:22	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 17:22	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	114	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 11:12	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 11:12	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 11:12	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 11:12	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 11:12	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 11:12	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 11:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	108	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW8A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-005** | Date Collected: 05.16.13 16.10 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**793**	20.0	0.560	mg/L	05.18.13 11:02		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4850**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0802**	0.0200	0.00756	mg/L	05.25.13 14:04		1
Chromium	7440-47-3	**0.0863**	0.0100	0.00355	mg/L	05.25.13 14:04		1
Iron	7439-89-6	**4.62**	0.200	0.0188	mg/L	05.25.13 14:04		1
Manganese	7439-96-5	**0.156**	0.0200	0.00291	mg/L	05.25.13 14:04		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0141**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW8A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-005** | Date Collected: 05.16.13 16.10 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 17:50	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 17:50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 17:50	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 17:50	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 14:56	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 14:56	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 14:56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 14:56	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 14:56	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 14:56	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 14:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW87A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-006** | Date Collected: 05.16.13 17.00 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1120**	20.0	0.560	mg/L	05.18.13 12:07		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2450**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0201**	0.0200	0.00756	mg/L	05.25.13 14:10		1
Chromium	7440-47-3	**0.0596**	0.0100	0.00355	mg/L	05.25.13 14:10		1
Iron	7439-89-6	**0.661**	0.200	0.0188	mg/L	05.25.13 14:10		1
Manganese	7439-96-5	**0.0851**	0.0200	0.00291	mg/L	05.25.13 14:10		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0162**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW87A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-006** | Date Collected: 05.16.13 17.00 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 18:18	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 18:18	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 18:18	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 18:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	114	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 15:11	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 15:11	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 15:11	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 15:11	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 15:11	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 15:11	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 15:11	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	88	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW25 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-007** | Date Collected: 05.16.13 09.50 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**265**	10.0	0.280	mg/L	05.18.13 12:29		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1400**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0105**	0.0200	0.00756	mg/L	05.25.13 14:16	J	1
Chromium	7440-47-3	**0.00547**	0.0100	0.00355	mg/L	05.25.13 14:16	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:16	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 14:16	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW25 051613** | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-007** | Date Collected: 05.16.13 09.50 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 18:44	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 18:44	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 18:44	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 18:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	107	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 11:28	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 11:28	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 11:28	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 11:28	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 11:28	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 11:28	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 11:28	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	80 - 120	%		
4-Bromofluorobenzene	80	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW14A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-008** | Date Collected: 05.16.13 10.45 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**46.0**	5.00	0.140	mg/L	05.18.13 12:50		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**440**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0198**	0.0200	0.00756	mg/L	05.25.13 14:22	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 14:22	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:22	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 14:22	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW14A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-008** | Date Collected: 05.16.13 10.45 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 19:10	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 19:10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 19:10	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 19:10	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 11:44	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 11:44	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 11:44	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 11:44	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 11:44	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 11:44	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 11:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	116	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW14 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-009** | Date Collected: 05.16.13 12.15 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1540**	20.0	0.560	mg/L	05.18.13 13:12		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3820**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0247**	0.0200	0.00756	mg/L	05.25.13 14:28		1
Chromium	7440-47-3	**0.0245**	0.0100	0.00355	mg/L	05.25.13 14:28		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:28	U	1
Manganese	7439-96-5	**0.128**	0.0200	0.00291	mg/L	05.25.13 14:28		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0172**	0.0100	0.00500	mg/L	05.17.13 09:40		1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW14 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-009** | Date Collected: 05.16.13 12.15 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 19:35	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 19:35	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 19:35	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 19:35	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:00	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:00	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:00	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:00	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:00	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:00	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:00	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	80 - 120	%		
4-Bromofluorobenzene	80	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW15 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-010** | Date Collected: 05.16.13 14.55 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**532**	20.0	0.560	mg/L	05.18.13 13:34		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2050**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0173**	0.0200	0.00756	mg/L	05.25.13 14:34	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 14:34	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:34	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 14:34	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914287 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW15 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-010** | Date Collected: 05.16.13 14.55 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 20:26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 20:26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 20:26	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 20:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:16	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:16	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:16	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:16	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:16	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:16	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:16	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	110	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW15A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-011** | Date Collected: 05.16.13 16.10 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1410**	20.0	0.560	mg/L	05.18.13 14:17		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3400**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00913**	0.0200	0.00756	mg/L	05.25.13 14:51	J	1
Chromium	7440-47-3	**0.00502**	0.0100	0.00355	mg/L	05.25.13 14:51	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:51	U	1
Manganese	7439-96-5	**0.00770**	0.0200	0.00291	mg/L	05.25.13 14:51	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914296 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW15A 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-011** | Date Collected: 05.16.13 16.10 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 20:53	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 20:53	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 20:53	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 20:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	107	70 - 135	%		
o-Terphenyl	117	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:32	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:32	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:32	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:32	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:32	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:32	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	80	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW16 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-012** | Date Collected: 05.16.13 17.25 | Date Received: 05.17.13 09.50

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**250**	10.0	0.280	mg/L	05.18.13 14:39		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**909**	5.00	5.00	mg/L	05.21.13 10:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0153**	0.0200	0.00756	mg/L	05.25.13 14:58	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 14:58	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 14:58	U	1
Manganese	7439-96-5	**0.00528**	0.0200	0.00291	mg/L	05.25.13 14:58	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914296 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW16 051613 | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-012** | Date Collected: 05.16.13 17.25 | Date Received: 05.17.13 09.50

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 21:18	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 21:18	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 21:18	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 21:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 14:40	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 14:40	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 14:40	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 14:40	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 14:40	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 14:40	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 14:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: TRIP BLANK | Matrix: Water | Sample Depth:

Lab Sample Id: **463335-013** | Date Collected: 05.16.13 00.00 | Date Received: 05.17.13 09.50

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 12:48	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 12:48	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 12:48	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 12:48	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 12:48	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 12:48	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 12:48	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Sample Id: 638386-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638386-1-BLK** | Date Collected: | Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914162 | Date Prep: 05.17.13 10.00

Prep seq: 638386

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**0.553**	1.00	0.0280	mg/L	05.18.13 07:47	J	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638417-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638417-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914275 | Date Prep: 05.21.13 08.30

Prep seq: 638417

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 10:08	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 10:08	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 10:08	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 10:08	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 10:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	84	80 - 120	%		

Sample Id: 638628-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638628-1-BLK** | Date Collected: | Date Received:

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 14:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638658-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638658-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** Prep Method: 3010A

Analyst: KUG % Moist: Tech: KUG

Seq Number: 914659 Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 12:30	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 12:30	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 12:30	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 12:30	U	1

Sample Id: 914287-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914287-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914287 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Sample Id: 914296-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914296-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914296 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463335

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **914558-1-BLK** | Matrix: Water | Sample Depth:

Lab Sample Id: **914558-1-BLK** | Date Collected: | Date Received:

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914558 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.21.13 10:00	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463335, **Project ID:** 073018

Lab Batch #: 914275 **Sample:** 638417-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 09:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914275 **Sample:** 638417-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 09:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 914275 **Sample:** 638417-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 10:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 914275 **Sample:** 463335-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 13:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 914275 **Sample:** 463335-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 13:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463335, **Project ID:** 073018

Lab Batch #: 914553 **Sample:** 638628-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 12:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	10.0	121	70-135	
o-Terphenyl	5.98	5.00	120	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.06	5.00	121	70-135	

Lab Batch #: 914553 **Sample:** 463335-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 21:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.33	5.00	127	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463335 **Project ID:** 073018

Lab Batch #: 914287 **Sample:** 914287-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0216	86	80-120	

Lab Batch #: 914296 **Sample:** 914296-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0215	86	80-120	

Lab Batch #: 914558 **Sample:** 914558-1-BKS **Matrix:** Water
Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	977	98	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463335 **Project ID:** 073018

Analyst: KEB **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914275 **Sample:** 638417-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0959	96	0.100	0.0986	99	3	70-125	25	
Toluene	<0.00100	0.100	0.0838	84	0.100	0.0850	85	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0792	79	0.100	0.0796	80	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.155	78	0.200	0.156	78	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0812	81	0.100	0.0813	81	0	71-133	25	

Analyst: KUG **Date Prepared:** 05/24/2013 **Date Analyzed:** 05/25/2013

Lab Batch ID: 914659 **Sample:** 638658-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.966	97	1.00	0.940	94	3	80-120	20	
Chromium	<0.00355	1.00	0.984	98	1.00	0.950	95	4	80-120	20	
Iron	<0.0188	5.00	4.85	97	5.00	4.66	93	4	80-120	20	
Manganese	<0.00291	1.00	0.893	89	1.00	0.863	86	3	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463335 **Project ID:** 073018

Analyst: AMB **Date Prepared:** 05/17/2013 **Date Analyzed:** 05/18/2013

Lab Batch ID: 914162 **Sample:** 638386-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	0.553	25.0	25.7	103	25.0	25.9	104	1	80-120	20	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914553 **Sample:** 638628-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	109	109	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	115	115	100	112	112	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463335

Lab Batch #: 914162 **Project ID:** 073018

Date Analyzed: 05/18/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB

QC- Sample ID: 463185-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	205	125	358	122	80-120	X

Lab Batch #: 914162

Date Analyzed: 05/18/2013 **Date Prepared:** 05/17/2013 **Analyst:** AMB

QC- Sample ID: 463335-010 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	532	500	1080	110	80-120	

Lab Batch #: 914553

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

QC- Sample ID: 463335-003 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	106	106	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	114	114	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463335 **Project ID:** 073018

Lab Batch ID: 914275 **QC- Sample ID:** 463335-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** KEB

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.102	102	0.100	0.103	103	1	70-125	25	
Toluene	<0.00100	0.100	0.0891	89	0.100	0.0889	89	0	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0844	84	0.100	0.0841	84	0	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.165	83	0.200	0.165	83	0	70-131	25	
o-Xylene	<0.000700	0.100	0.0864	86	0.100	0.0857	86	1	71-133	25	

Lab Batch ID: 914287 **QC- Sample ID:** 463335-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.0160	0.250	0.260	98	0.250	0.266	100	2	80-120	20	

Lab Batch ID: 914296 **QC- Sample ID:** 463335-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.244	98	0.250	0.243	97	0	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463335 **Project ID:** 073018

Lab Batch ID: 914659 **QC- Sample ID:** 463326-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/25/2013 **Date Prepared:** 05/24/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.00855	1.00	1.02	101	1.00	1.02	101	0	75-125	20	
Chromium	<0.00355	1.00	0.966	97	1.00	0.960	96	1	75-125	20	
Iron	0.214	5.00	4.96	95	5.00	4.93	94	1	75-125	20	
Manganese	0.0468	1.00	0.917	87	1.00	0.911	86	1	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463335

Lab Batch #: 914287 **Project ID:** 073018
Date Analyzed: 05/17/2013 09:40 **Date Prepared:** 05/17/2013 **Analyst:** WRU
QC- Sample ID: 463335-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	0.0160	0.0160	0	20	

Lab Batch #: 914296
Date Analyzed: 05/17/2013 09:40 **Date Prepared:** 05/17/2013 **Analyst:** WRU
QC- Sample ID: 463335-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

Chromium, Hexavalent by SW 7196A Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914558
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463245-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2400	2540	6	30	

Lab Batch #: 914558
Date Analyzed: 05/21/2013 10:00 **Date Prepared:** 05/21/2013 **Analyst:** AMB
QC- Sample ID: 463335-008 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	440	448	2	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322813 Page 1 of 2

Company-City CRA - Midland **Phone** 432-686-0086

Lab Only: 463335

Project Name-Location N Eunice ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)** Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0186

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	method 8021 B BTEX	Diss metals method 6010B	TDS Sm 2540 C	Chlorides E300	TPH GRO+DRO 8015 mod	Hex chrome 7196A				TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:
1	MW3051613	5-16-13	1010		W		X	7													X	X	X	X	X	X										1
2	MW7405 1613		1045																																	2
3	MW7 051613		1200																																	3
4	MW8 051613		1505																																	4
5	MW8A051613		1610																																	5
6	MW87A051613		1700																																	6
7	MW25051613		950																																	7
8	MW14A051613		1045																																	8
9	MW14051613		1215																																	9
10	MW15051613		1455																																	10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1)	5-16-13 1835	2)	5/16/13
2) 3)		4)	18:03
3) 5)		6)	5/17/13 9:50

Total Containers per COC: 7 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322812 Page 2 of 2

Company-City CRA-Midland **Phone** 432-686-0086

Lab Only: 463335

Project Name-Location N Emile ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0180

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	method 8021 BTEX	Piss metals 6010B	TDS SRS 160C	Chlorides E300	TPH Geo + Deo 8015 mod	Hex Chrome 7196A				TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW15A051613	5-16-13	1610		W		X	7													X	X	X	X	X	X											1
2	MW16051613	↓	1725																		↓	↓	↓	↓	↓	↓											2
3	Trip Blank																																				3
4																																					4
5																																					5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1)	5-16-13 1835	2) SHORCH COURIER	5/16/13
2	3)		4)	18:42
3	5)		6)	

Total Containers per COC: 7 Cooler Temp: °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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Final 1.001

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/17/2013 09:50:00 AM

Work Order #: 463335

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/17/2013

Checklist reviewed by: Kelsey Brooks Date: 05/17/2013

Analytical Report 463374

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

28-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

28-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463374**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463374. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463374 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW10 051713	W	05-17-13 09:40		463374-001
MW40A 051713	W	05-17-13 10:35		463374-002
MW13 051713	W	05-17-13 11:15		463374-003
MW13A 051713	W	05-17-13 12:10		463374-004
TRIP BLANK	W	05-17-13 00:00		463374-005

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*28-MAY-13*
Work Order Number(s):	*463374*	Date Received:	*05/17/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-914296 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914296, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463374-004, -002, -001, -003.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Batch: LBA-914571 Inorganic Anions by EPA 300/300.1
E300

Batch 914571, Chloride detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463374-004, -002, -001, -003.

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*28-MAY-13*
Work Order Number(s):	*463374*	Date Received:	*05/17/2013*

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW10 051713** Matrix: Water Sample Depth:

Lab Sample Id: **463374-001** Date Collected: 05.17.13 09.40 Date Received: 05.17.13 15.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.21.13 10.00 Tech: AMB

Seq Number: 914571 Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**2440**	50.0	1.40	mg/L	05.22.13 16:38		50

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914533 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**6280**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0107**	0.0200	0.00756	mg/L	05.25.13 15:03	J	1
Chromium	7440-47-3	**0.0235**	0.0100	0.00355	mg/L	05.25.13 15:03		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:03	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:03	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914296 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0220**	0.0100	0.00500	mg/L	05.17.13 16:30		1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW10 051713**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463374-001**	Date Collected: 05.17.13 09.40	Date Received: 05.17.13 15.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 22:10	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 22:10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 22:10	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 22:10	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 22:14	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 22:14	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 22:14	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 22:14	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 22:14	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 22:14	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 22:14	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	80 - 120	%		
4-Bromofluorobenzene	108	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW40A 051713** Matrix: Water Sample Depth:

Lab Sample Id: **463374-002** Date Collected: 05.17.13 10.35 Date Received: 05.17.13 15.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.21.13 10.00 Tech: AMB

Seq Number: 914571 Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**50.3**	5.00	0.140	mg/L	05.22.13 17:00		5

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914533 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**448**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0191**	0.0200	0.00756	mg/L	05.25.13 15:10	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 15:10	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:10	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:10	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914296 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 16:30	U	1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW40A 051713**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463374-002**	Date Collected: 05.17.13 10.35	Date Received: 05.17.13 15.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 22:36	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 22:36	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 22:36	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 22:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 22:30	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 22:30	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 22:30	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 22:30	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 22:30	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 22:30	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 22:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	80 - 120	%		
4-Bromofluorobenzene	86	80 - 120	%		

Final 1.000

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW13 051713** Matrix: Water Sample Depth:

Lab Sample Id: **463374-003** Date Collected: 05.17.13 11.15 Date Received: 05.17.13 15.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.21.13 10.00 Tech: AMB

Seq Number: 914571 Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**301**	20.0	0.560	mg/L	05.22.13 17:21		20

Analytical Method: **TDS by SM2540C** % Moist: Prep Method:

Analyst: AMB Date Prep: Tech: AMB

Seq Number: 914533 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1730**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00930**	0.0200	0.00756	mg/L	05.25.13 15:15	J	1
Chromium	7440-47-3	**0.275**	0.0100	0.00355	mg/L	05.25.13 15:15		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:15	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:15	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914296 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.274**	0.0100	0.00500	mg/L	05.17.13 16:30		1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW13 051713**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463374-003**	Date Collected: 05.17.13 11.15	Date Received: 05.17.13 15.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 23:01	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 23:01	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 23:01	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 23:01	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	DYV	Date Prep:	05.21.13 15.00	Tech:	DYV
Seq Number:	914299	Prep seq:	638464		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 22:46	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 22:46	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 22:46	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 22:46	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 22:46	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 22:46	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 22:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	80	80 - 120	%		
4-Bromofluorobenzene	95	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW13A 051713**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**463374-004**	Date Collected: 05.17.13 12.10		Date Received: 05.17.13 15.40	

Analytical Method:	**Inorganic Anions by EPA 300/300.1**	% Moist:		Prep Method:	E300P
Analyst:	AMB	Date Prep:	05.21.13 10.00	Tech:	AMB
Seq Number:	914571	Prep seq:	638636		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**67.6**	5.00	0.140	mg/L	05.22.13 17:43		5

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914533	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**460**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method:	**Dissolved Metals per ICP by SW846 6010B**	% Moist:		Prep Method:	3010A
Analyst:	KUG	Date Prep:	05.24.13 16.35	Tech:	KUG
Seq Number:	914659	Prep seq:	638658		
Subcontractor:	SUB: E871002				

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0303**	0.0200	0.00756	mg/L	05.25.13 15:21		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 15:21	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:21	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:21	U	1

Analytical Method:	**Chromium, Hexavalent by SW 7196A**	% Moist:		Prep Method:	
Analyst:	WRU	Date Prep:		Tech:	WRU
Seq Number:	914296	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 16:30	U	1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**MW13A 051713**	Matrix: Water	Sample Depth:
Lab Sample Id:	**463374-004**	Date Collected: 05.17.13 12.10	Date Received: 05.17.13 15.40

Analytical Method:	**TPH By SW8015 Mod**	% Moist:		Prep Method:	1005
Analyst:	DYV	Date Prep:	05.23.13 11.00	Tech:	DYV
Seq Number:	914553	Prep seq:	638628		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 23:27	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 23:27	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 23:27	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 23:27	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method:	**BTEX by EPA 8021B**	% Moist:		Prep Method:	5030B
Analyst:	KEB	Date Prep:	05.22.13 11.00	Tech:	KEB
Seq Number:	914370	Prep seq:	638510		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 14:05	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 14:05	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 14:05	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 14:05	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 14:05	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.22.13 14:05	U	
Total BTEX		ND		0.000500	mg/L	05.22.13 14:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	80 - 120	%		
4-Bromofluorobenzene	83	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **TRIP BLANK** Matrix: Water Sample Depth:

Lab Sample Id: **463374-005** Date Collected: 05.17.13 00.00 Date Received: 05.17.13 15.40

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: KEB Date Prep: 05.22.13 11.00 Tech: KEB

Seq Number: 914370 Prep seq: 638510

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 14:21	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 14:21	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 14:21	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 14:21	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 14:21	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.22.13 14:21	U	
Total BTEX		ND		0.000500	mg/L	05.22.13 14:21	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Sample Id: **638464-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638464-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: DYV Date Prep: 05.21.13 15.00 Tech: DYV

Seq Number: 914299 Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	117	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638510-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638510-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** % Moist: Prep Method: 5030B

Analyst: KEB Date Prep: 05.22.13 11.00 Tech: KEB

Seq Number: 914370 Prep seq: 638510

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 12:29	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 12:29	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 12:29	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 12:29	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 12:29	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Sample Id: **638628-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638628-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** % Moist: Prep Method: 1005

Analyst: DYV Date Prep: 05.23.13 11.00 Tech: DYV

Seq Number: 914553 Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 14:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638636-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638636-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** % Moist: Prep Method: E300P

Analyst: AMB Date Prep: 05.21.13 10.00 Tech: AMB

Seq Number: 914571 Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**0.548**	1.00	0.0280	mg/L	05.21.13 13:19	J	1

Sample Id: **638658-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638658-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** % Moist: Prep Method: 3010A

Analyst: KUG Date Prep: 05.24.13 16.35 Tech: KUG

Seq Number: 914659 Prep seq: 638658

Subcontractor: SUB: E871002

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 12:30	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 12:30	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 12:30	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 12:30	U	1

Sample Id: **914296-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914296-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** % Moist: Prep Method:

Analyst: WRU Date Prep: Tech: WRU

Seq Number: 914296 Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id:	**914533-1-BLK**	Matrix: Water		Sample Depth:	
Lab Sample Id:	**914533-1-BLK**	Date Collected:		Date Received:	

Analytical Method:	**TDS by SM2540C**	% Moist:		Prep Method:	
Analyst:	AMB	Date Prep:		Tech:	AMB
Seq Number:	914533	Prep seq:			

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.22.13 13:00	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463374, **Project ID:** 073018

Lab Batch #: 914299 **Sample:** 638464-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 17:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463374, **Project ID:** 073018

Lab Batch #: 914370 **Sample:** 638510-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 11:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

Lab Batch #: 914370 **Sample:** 638510-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 11:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 914370 **Sample:** 638510-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 12:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 914370 **Sample:** 463469-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 15:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 914370 **Sample:** 463469-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 15:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463374, **Project ID:** 073018

Lab Batch #: 914553 **Sample:** 638628-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 12:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	10.0	121	70-135	
o-Terphenyl	5.98	5.00	120	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.06	5.00	121	70-135	

Lab Batch #: 914553 **Sample:** 463335-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 21:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.33	5.00	127	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463374 **Project ID:** 073018

Lab Batch #: 914296 **Sample:** 914296-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0215	86	80-120	

Lab Batch #: 914533 **Sample:** 914533-1-BKS **Matrix:** Water
Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	915	92	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463374 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914299 **Sample:** 638464-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0977	98	0.100	0.102	102	4	70-125	25	
Toluene	<0.00100	0.100	0.105	105	0.100	0.106	106	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.114	114	0.100	0.111	111	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.209	105	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0991	99	0.100	0.107	107	8	71-133	25	

Analyst: KEB **Date Prepared:** 05/22/2013 **Date Analyzed:** 05/22/2013

Lab Batch ID: 914370 **Sample:** 638510-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0954	95	0.100	0.0951	95	0	70-125	25	
Toluene	<0.00100	0.100	0.0914	91	0.100	0.0915	92	0	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0950	95	0.100	0.0940	94	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.188	94	0.200	0.186	93	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0974	97	0.100	0.0965	97	1	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463374
Project ID: 073018

Analyst: KUG
Date Prepared: 05/24/2013
Date Analyzed: 05/25/2013

Lab Batch ID: 914659
Sample: 638658-1-BKS
Batch #: 1
Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.966	97	1.00	0.940	94	3	80-120	20	
Chromium	<0.00355	1.00	0.984	98	1.00	0.950	95	4	80-120	20	
Iron	<0.0188	5.00	4.85	97	5.00	4.66	93	4	80-120	20	
Manganese	<0.00291	1.00	0.893	89	1.00	0.863	86	3	80-120	20	

Analyst: AMB
Date Prepared: 05/21/2013
Date Analyzed: 05/21/2013

Lab Batch ID: 914571
Sample: 638636-1-BKS
Batch #: 1
Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	0.548	25.0	25.4	102	25.0	25.3	101	0	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463374
Analyst: DYV
Lab Batch ID: 914553 **Sample:** 638628-1-BKS
Units: mg/L

Date Prepared: 05/23/2013
Batch #: 1

Project ID: 073018
Date Analyzed: 05/23/2013
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	109	109	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	115	115	100	112	112	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463374

Lab Batch #: 914571 **Project ID:** 073018

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB

QC- Sample ID: 463353-005 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	104	125	237	106	80-120	

Lab Batch #: 914571

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB

QC- Sample ID: 463385-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	20.4	50.0	76.6	112	80-120	

Lab Batch #: 914553

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

QC- Sample ID: 463335-003 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	106	106	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	114	114	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463374 **Project ID:** 073018

Lab Batch ID: 914299 **QC- Sample ID:** 463245-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0956	96	0.100	0.108	108	12	70-125	25	
Toluene	<0.00100	0.100	0.108	108	0.100	0.102	102	6	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.117	117	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.216	108	2	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.112	112	4	71-133	25	

Lab Batch ID: 914370 **QC- Sample ID:** 463469-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** KEB

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0966	97	0.100	0.101	101	4	70-125	25	
Toluene	<0.00100	0.100	0.0927	93	0.100	0.0975	98	5	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0947	95	0.100	0.102	102	7	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.186	93	0.200	0.201	101	8	70-131	25	
o-Xylene	<0.000700	0.100	0.0972	97	0.100	0.106	106	9	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463374 **Project ID:** 073018

Lab Batch ID: 914296 **QC- Sample ID:** 463335-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.244	98	0.200	0.243	122	0	80-120	20	X

Lab Batch ID: 914659 **QC- Sample ID:** 463326-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/25/2013 **Date Prepared:** 05/24/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.00855	1.00	1.02	101	1.00	1.02	101	0	75-125	20	
Chromium	<0.00355	1.00	0.966	97	1.00	0.960	96	1	75-125	20	
Iron	0.214	5.00	4.96	95	5.00	4.93	94	1	75-125	20	
Manganese	0.0468	1.00	0.917	87	1.00	0.911	86	1	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463374

Lab Batch #: 914296 **Project ID:** 073018
Date Analyzed: 05/17/2013 09:40 **Date Prepared:** 05/17/2013 **Analyst:** WRU
QC- Sample ID: 463335-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Chromium, Hexavalent by SW 7196A Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914533
Date Analyzed: 05/22/2013 13:00 **Date Prepared:** 05/22/2013 **Analyst:** AMB
QC- Sample ID: 463353-007 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	559	620	10	30	

Lab Batch #: 914533
Date Analyzed: 05/22/2013 13:00 **Date Prepared:** 05/22/2013 **Analyst:** AMB
QC- Sample ID: 463385-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	302	316	5	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330796 Page 1 of 1

Company-City: CRA - Midland **Phone:** 432-686-0086

Lab Only: 463374

Project Name-Location: N. Eunice ☐ Previously done at XENCO **Project ID:** 073018

TAT: ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM): Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0186

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Justin Nixon **Signature:** [signature]

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals method 6010	TDS Sm 2540 C	Chlorides E300	TPH GRO + DRO 8015 mod	Hex Chrome 7196 A				TATASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:
1	MW10 051713	5-17-13	940		W		X	7													X	X	X	X	X	X										1
2	MW40A 051713	↓	1035																		↓	↓	↓	↓	↓	↓										2
3	MW13 051713	↓	1115																		↓	↓	↓	↓	↓	↓										3
4	MW13A 051713	↓	1210																		↓	↓	↓	↓	↓	↓										4
5	Trip blank	↓																																		5
6																																				6
7																																				7
8																																				8
9																																				9
10																																				10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) [signature]	5-17-13 15:40	2) [signature]	5-17-13 15:40
3)		4)	
5)		6)	

Total Containers per COC: Cooler Temp: 5.0 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/17/2013 03:40:00 PM

Work Order #: 463374

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/20/2013

Checklist reviewed by: Kelsey Brooks Date: 05/20/2013

Analytical Report 463374

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

31-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

31-MAY-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463374**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463374. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463374 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW10 051713	W	05-17-13 09:40		463374-001
MW40A 051713	W	05-17-13 10:35		463374-002
MW13 051713	W	05-17-13 11:15		463374-003
MW13A 051713	W	05-17-13 12:10		463374-004
TRIP BLANK	W	05-17-13 00:00		463374-005

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*31-MAY-13*
Work Order Number(s):	*463374*	Date Received:	*05/17/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-914296 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914296, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463374-004, -002, -001, -003.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

Batch: LBA-914571 Inorganic Anions by EPA 300/300.1
E300

Batch 914571, Chloride detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463374-004, -002, -001, -003.

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW10 051713 | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-001** | Date Collected: 05.17.13 09.40 | Date Received: 05.17.13 15.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914571 | Date Prep: 05.21.13 10.00

Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**2440**	50.0	1.40	mg/L	05.22.13 16:38		50

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914533 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**6280**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0107**	0.0200	0.00756	mg/L	05.25.13 15:03	J	1
Chromium	7440-47-3	**0.0235**	0.0100	0.00355	mg/L	05.25.13 15:03		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:03	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:03	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914296 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0220**	0.0100	0.00500	mg/L	05.17.13 16:30		1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW10 051713** | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-001** | Date Collected: 05.17.13 09.40 | Date Received: 05.17.13 15.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 22:10	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 22:10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 22:10	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 22:10	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	115	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 22:14	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 22:14	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 22:14	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 22:14	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 22:14	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 22:14	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 22:14	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	80 - 120	%		
4-Bromofluorobenzene	108	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW40A 051713 | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-002** | Date Collected: 05.17.13 10.35 | Date Received: 05.17.13 15.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914571 | Date Prep: 05.21.13 10.00

Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**50.3**	5.00	0.140	mg/L	05.22.13 17:00		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914533 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**448**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0191**	0.0200	0.00756	mg/L	05.25.13 15:10	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 15:10	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:10	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:10	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914296 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 16:30	U	1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW40A 051713 | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-002** | Date Collected: 05.17.13 10.35 | Date Received: 05.17.13 15.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 22:36	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 22:36	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 22:36	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 22:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 22:30	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 22:30	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 22:30	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 22:30	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 22:30	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 22:30	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 22:30	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	80 - 120	%		
4-Bromofluorobenzene	86	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW13 051713 | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-003** | Date Collected: 05.17.13 11.15 | Date Received: 05.17.13 15.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914571 | Date Prep: 05.21.13 10.00

Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**301**	20.0	0.560	mg/L	05.22.13 17:21		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914533 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1730**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00930**	0.0200	0.00756	mg/L	05.25.13 15:15	J	1
Chromium	7440-47-3	**0.275**	0.0100	0.00355	mg/L	05.25.13 15:15		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:15	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:15	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914296 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.274**	0.0100	0.00500	mg/L	05.17.13 16:30		1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW13 051713 | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-003** | Date Collected: 05.17.13 11.15 | Date Received: 05.17.13 15.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 23:01	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 23:01	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 23:01	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 23:01	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 22:46	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 22:46	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 22:46	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 22:46	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 22:46	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.21.13 22:46	U	
Total BTEX		ND		0.000500	mg/L	05.21.13 22:46	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	80	80 - 120	%		
4-Bromofluorobenzene	95	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW13A 051713 | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-004** | Date Collected: 05.17.13 12.10 | Date Received: 05.17.13 15.40

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914571 | Date Prep: 05.21.13 10.00

Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**67.6**	5.00	0.140	mg/L	05.22.13 17:43		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914533 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**460**	5.00	5.00	mg/L	05.22.13 13:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914659 | Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 | Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0303**	0.0200	0.00756	mg/L	05.25.13 15:21		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 15:21	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 15:21	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 15:21	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914296 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 16:30	U	1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW13A 051713 | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-004** | Date Collected: 05.17.13 12.10 | Date Received: 05.17.13 15.40

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 23:27	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 23:27	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 23:27	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 23:27	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	103	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914370 | Date Prep: 05.22.13 11.00

Prep seq: 638510

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 14:05	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 14:05	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 14:05	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 14:05	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 14:05	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.22.13 14:05	U	
Total BTEX		ND		0.000500	mg/L	05.22.13 14:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	80 - 120	%		
4-Bromofluorobenzene	83	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: TRIP BLANK | Matrix: Water | Sample Depth:

Lab Sample Id: **463374-005** | Date Collected: 05.17.13 00.00 | Date Received: 05.17.13 15.40

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914370 | Date Prep: 05.22.13 11.00

Prep seq: 638510

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 14:21	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 14:21	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 14:21	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 14:21	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 14:21	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.22.13 14:21	U	
Total BTEX		ND		0.000500	mg/L	05.22.13 14:21	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	81	80 - 120	%		

Sample Id: 638464-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638464-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914299 | Date Prep: 05.21.13 15.00

Prep seq: 638464

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.21.13 18:24	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.21.13 18:24	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.21.13 18:24	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.21.13 18:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	117	80 - 120	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638510-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638510-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: KEB | % Moist: | Tech: KEB

Seq Number: 914370 | Date Prep: 05.22.13 11.00

Prep seq: 638510

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 12:29	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 12:29	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 12:29	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 12:29	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 12:29	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Sample Id: 638628-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638628-1-BLK** | Date Collected: | Date Received:

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 14:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638636-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638636-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914571 Date Prep: 05.21.13 10.00

Prep seq: 638636

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**0.548**	1.00	0.0280	mg/L	05.21.13 13:19	J	1

Sample Id: 638658-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638658-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** Prep Method: 3010A

Analyst: KUG % Moist: Tech: KUG

Seq Number: 914659 Date Prep: 05.24.13 16.35

Subcontractor: SUB: E871002 Prep seq: 638658

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.25.13 12:30	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.25.13 12:30	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.25.13 12:30	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.25.13 12:30	U	1

Sample Id: 914296-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914296-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914296 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.17.13 09:40	U	1

Certificate of Analytical Results 463374

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **914533-1-BLK** | Matrix: Water | Sample Depth:

Lab Sample Id: **914533-1-BLK** | Date Collected: | Date Received:

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914533 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.22.13 13:00	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463374, **Project ID:** 073018

Lab Batch #: 914299 **Sample:** 638464-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 17:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 914299 **Sample:** 638464-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 18:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 914299 **Sample:** 463245-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/21/13 23:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463374, **Project ID:** 073018

Lab Batch #: 914370 **Sample:** 638510-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 11:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

Lab Batch #: 914370 **Sample:** 638510-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 11:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 914370 **Sample:** 638510-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 12:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 914370 **Sample:** 463469-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 15:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 914370 **Sample:** 463469-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 15:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463374, **Project ID:** 073018

Lab Batch #: 914553 **Sample:** 638628-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 12:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	10.0	121	70-135	
o-Terphenyl	5.98	5.00	120	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.06	5.00	121	70-135	

Lab Batch #: 914553 **Sample:** 463335-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 21:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.33	5.00	127	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463374 **Project ID:** 073018

Lab Batch #: 914296 **Sample:** 914296-1-BKS **Matrix:** Water
Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0215	86	80-120	

Lab Batch #: 914533 **Sample:** 914533-1-BKS **Matrix:** Water
Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	915	92	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463374 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914299 **Sample:** 638464-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0977	98	0.100	0.102	102	4	70-125	25	
Toluene	<0.00100	0.100	0.105	105	0.100	0.106	106	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.114	114	0.100	0.111	111	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.209	105	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0991	99	0.100	0.107	107	8	71-133	25	

Analyst: KEB **Date Prepared:** 05/22/2013 **Date Analyzed:** 05/22/2013

Lab Batch ID: 914370 **Sample:** 638510-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0954	95	0.100	0.0951	95	0	70-125	25	
Toluene	<0.00100	0.100	0.0914	91	0.100	0.0915	92	0	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0950	95	0.100	0.0940	94	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.188	94	0.200	0.186	93	1	70-131	25	
o-Xylene	<0.000700	0.100	0.0974	97	0.100	0.0965	97	1	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463374 **Project ID:** 073018

Analyst: KUG **Date Prepared:** 05/24/2013 **Date Analyzed:** 05/25/2013

Lab Batch ID: 914659 **Sample:** 638658-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.966	97	1.00	0.940	94	3	80-120	20	
Chromium	<0.00355	1.00	0.984	98	1.00	0.950	95	4	80-120	20	
Iron	<0.0188	5.00	4.85	97	5.00	4.66	93	4	80-120	20	
Manganese	<0.00291	1.00	0.893	89	1.00	0.863	86	3	80-120	20	

Analyst: AMB **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914571 **Sample:** 638636-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	0.548	25.0	25.4	102	25.0	25.3	101	0	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463374
Analyst: DYV
Lab Batch ID: 914553 **Sample:** 638628-1-BKS
Units: mg/L

Date Prepared: 05/23/2013
Batch #: 1

Project ID: 073018
Date Analyzed: 05/23/2013
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	109	109	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	115	115	100	112	112	3	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463374

Lab Batch #: 914571 **Project ID:** 073018

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB

QC- Sample ID: 463353-005 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	104	125	237	106	80-120	

Lab Batch #: 914571

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** AMB

QC- Sample ID: 463385-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	20.4	50.0	76.6	112	80-120	

Lab Batch #: 914553

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

QC- Sample ID: 463335-003 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	106	106	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	114	114	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463374 **Project ID:** 073018

Lab Batch ID: 914299 **QC- Sample ID:** 463245-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0956	96	0.100	0.108	108	12	70-125	25	
Toluene	<0.00100	0.100	0.108	108	0.100	0.102	102	6	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.117	117	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.211	106	0.200	0.216	108	2	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.112	112	4	71-133	25	

Lab Batch ID: 914370 **QC- Sample ID:** 463469-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** KEB

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0966	97	0.100	0.101	101	4	70-125	25	
Toluene	<0.00100	0.100	0.0927	93	0.100	0.0975	98	5	70-125	25	
Ethylbenzene	<0.000700	0.100	0.0947	95	0.100	0.102	102	7	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.186	93	0.200	0.201	101	8	70-131	25	
o-Xylene	<0.000700	0.100	0.0972	97	0.100	0.106	106	9	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463374 **Project ID:** 073018

Lab Batch ID: 914296 **QC- Sample ID:** 463335-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/17/2013 **Date Prepared:** 05/17/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.244	98	0.250	0.243	97	0	80-120	20	

Lab Batch ID: 914659 **QC- Sample ID:** 463326-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/25/2013 **Date Prepared:** 05/24/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.00855	1.00	1.02	101	1.00	1.02	101	0	75-125	20	
Chromium	<0.00355	1.00	0.966	97	1.00	0.960	96	1	75-125	20	
Iron	0.214	5.00	4.96	95	5.00	4.93	94	1	75-125	20	
Manganese	0.0468	1.00	0.917	87	1.00	0.911	86	1	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463374

Lab Batch #: 914296 **Project ID:** 073018
Date Analyzed: 05/17/2013 09:40 **Date Prepared:** 05/17/2013 **Analyst:** WRU
QC- Sample ID: 463335-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Chromium, Hexavalent by SW 7196A Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	<0.00500	0	20	U

Lab Batch #: 914533
Date Analyzed: 05/22/2013 13:00 **Date Prepared:** 05/22/2013 **Analyst:** AMB
QC- Sample ID: 463353-007 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	559	620	10	30	

Lab Batch #: 914533
Date Analyzed: 05/22/2013 13:00 **Date Prepared:** 05/22/2013 **Analyst:** AMB
QC- Sample ID: 463385-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	302	316	5	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 330796 Page 1 of 1

Company-City: CRA - Midland **Phone:** 432-686-0086

Lab Only: 463374

Project Name-Location: N. Eunice ☐ Previously done at XENCO **Project ID:** 073018

TAT: ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM):** Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0186

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name: Justin Nixon **Signature:** [signature]

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals method 6010	TDS SM 2540 C	Chlorides E300	TPH GRO + DRO 8015 mod	Hex Chrome 7196 A				TATASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW10 051713	5-17-13	940		W		X	7													X	X	X	X	X	X											1
2	MW40A 051713	↓	1035																		↓	↓	↓	↓	↓	↓											2
3	MW13 051713	↓	1115																		↓	↓	↓	↓	↓	↓											3
4	MW13A 051713	↓	1210																		↓	↓	↓	↓	↓	↓											4
5	Trip blank	↓																																			5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1) [signature]	5-17-13 15:40	2) [signature]	5-17-13 15:40
2	3)		4)	
3	5)		6)	

Total Containers per COC: Cooler Temp: 5.0 °C

Remarks

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

Committed to Excellence in Service and Quality *www.xenco.com*

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/17/2013 03:40:00 PM

Work Order #: 463374

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/20/2013

Checklist reviewed by: Kelsey Brooks Date: 05/20/2013

Analytical Report 463472

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

05-JUN-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

05-JUN-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463472**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463472. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463472 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW8M 052013	W	05-20-13 09:55		463472-001
RW004A 052013	W	05-20-13 10:45		463472-002
MW47 052013	W	05-20-13 12:15		463472-003
MW11A 052013	W	05-20-13 14:50		463472-004
MW11 052013	W	05-20-13 15:40		463472-005
MW11M 052013	W	05-20-13 16:15		463472-006
RW002 0520B	W	05-20-13 17:15		463472-007
MW26 052013	W	05-20-13 16:00		463472-008
MW28 052013	W	05-20-13 09:40		463472-009
MW32 052013	W	05-20-13 11:00		463472-010
MW33 052013	W	05-20-13 12:10		463472-011
MW27 052013	W	05-20-13 14:05		463472-012
MW23A 052013	W	05-20-13 17:25		463472-013
Trip Blank	W	05-20-13 00:00		463472-014
DUP5 052013	W	05-20-13 00:00		463472-015

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*05-JUN-13*
Work Order Number(s):	*463472*	Date Received:	*05/21/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-914785 Chromium, Hexavalent by SW 7196A
SW7196A

Batch 914785, Hexavalent Chromium recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463472-015, -012, -013, -011.
The Laboratory Control Sample for Hexavalent Chromium is within laboratory Control Limits

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*05-JUN-13*
Work Order Number(s):	*463472*	Date Received:	*05/21/2013*

Batch: LBA-914960 Dissolved Metals per ICP by SW846 6010B
SW6010B

Batch 914960, Iron detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463472-015, -010, -005, -008, -007, -012, -013, -006, -009, -011, -001, -002, -004, -003.

SW6010B

Batch 914960, Iron, Manganese recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 463472-015, -010, -005, -008, -007, -012, -013, -006, -009, -011, -001, -002, -004, -003.
The Laboratory Control Sample for Iron, Manganese is within laboratory Control Limits

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW8M 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-001** | Date Collected: 05.20.13 09.55 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 15.44

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1370**	50.0	1.40	mg/L	05.23.13 15:44		50

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**5100**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 19:33	U	1
Chromium	7440-47-3	**0.00812**	0.0100	0.00355	mg/L	05.29.13 19:33	J	1
Iron	7439-89-6	**14.6**	0.200	0.0188	mg/L	05.29.13 19:33		1
Manganese	7439-96-5	**3.01**	0.0200	0.00291	mg/L	05.29.13 19:33		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.21.13 09:30	U	10

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW8M 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-001** | Date Collected: 05.20.13 09.55 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 17:22	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 17:22	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 17:22	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 17:22	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	116	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 23:56	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 23:56	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 23:56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 23:56	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 23:56	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 23:56	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 23:56	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	80 - 120	%		
4-Bromofluorobenzene	101	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: RW004A 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-002** | Date Collected: 05.20.13 10.45 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 16.05

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**462**	20.0	0.560	mg/L	05.23.13 16:05		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3780**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0102**	0.0200	0.00756	mg/L	05.29.13 19:39	J	1
Chromium	7440-47-3	**0.0260**	0.0100	0.00355	mg/L	05.29.13 19:39		1
Iron	7439-89-6	**7.25**	0.200	0.0188	mg/L	05.29.13 19:39		1
Manganese	7439-96-5	**0.215**	0.0200	0.00291	mg/L	05.29.13 19:39		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.21.13 09:30	U	10

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: RW004A 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-002** | Date Collected: 05.20.13 10.45 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.31.13 15:54	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.31.13 15:54	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.31.13 15:54	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.31.13 15:54	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	118	70 - 135	%		
o-Terphenyl	130	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 00:45	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 00:45	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.24.13 00:45	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 00:45	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 00:45	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 00:45	U	
Total BTEX		ND		0.000500	mg/L	05.24.13 00:45	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	112	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW47 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-003** | Date Collected: 05.20.13 12.15 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 16.27

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**248**	10.0	0.280	mg/L	05.23.13 16:27		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1770**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 19:45	U	1
Chromium	7440-47-3	**0.0487**	0.0100	0.00355	mg/L	05.29.13 19:45		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.29.13 19:45	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 19:45	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0433**	0.0100	0.00500	mg/L	05.21.13 09:30		1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW47 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-003** | Date Collected: 05.20.13 12.15 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 18:15	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 18:15	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 18:15	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 18:15	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	98	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 22:51	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 22:51	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 22:51	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 22:51	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 22:51	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 22:51	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 22:51	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW11A 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-004** | Date Collected: 05.20.13 14.50 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 16.49

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1250**	20.0	0.560	mg/L	05.23.13 16:49	E	20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4540**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 19:51	U	1
Chromium	7440-47-3	**2.27**	0.0100	0.00355	mg/L	05.29.13 19:51		1
Iron	7439-89-6	**0.0506**	0.200	0.0188	mg/L	05.29.13 19:51	BJ	1
Manganese	7439-96-5	**0.0424**	0.0200	0.00291	mg/L	05.29.13 19:51		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**1.94**	0.100	0.0500	mg/L	05.21.13 09:30		10

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW11A 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-004** | Date Collected: 05.20.13 14.50 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 15:37	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 15:37	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 15:37	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 15:37	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	114	70 - 135	%		
o-Terphenyl	129	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 23:07	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 23:07	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 23:07	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 23:07	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 23:07	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 23:07	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 23:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW11 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-005** | Date Collected: 05.20.13 15.40 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 17.54

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1130**	20.0	0.560	mg/L	05.23.13 17:54	E	20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3430**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0108**	0.0200	0.00756	mg/L	05.29.13 19:57	J	1
Chromium	7440-47-3	**0.0143**	0.0100	0.00355	mg/L	05.29.13 19:57		1
Iron	7439-89-6	**0.598**	0.200	0.0188	mg/L	05.29.13 19:57		1
Manganese	7439-96-5	**1.90**	0.0200	0.00291	mg/L	05.29.13 19:57		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.21.13 09:30	U	10

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW11 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-005** | Date Collected: 05.20.13 15.40 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 16:06	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 16:06	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 16:06	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 16:06	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	118	70 - 135	%		
o-Terphenyl	130	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 23:40	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 23:40	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 23:40	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 23:40	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 23:40	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 23:40	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 23:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	116	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW11M 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-006** | Date Collected: 05.20.13 16.15 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 18.33

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1290**	20.0	0.560	mg/L	05.23.13 18:33	E	20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4400**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 20:03	U	1
Chromium	7440-47-3	**0.0189**	0.0100	0.00355	mg/L	05.29.13 20:03		1
Iron	7439-89-6	**0.173**	0.200	0.0188	mg/L	05.29.13 20:03	J	1
Manganese	7439-96-5	**0.00474**	0.0200	0.00291	mg/L	05.29.13 20:03	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.21.13 09:30	U	10

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW11M 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-006** | Date Collected: 05.20.13 16.15 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 18:41	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 18:41	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 18:41	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 18:41	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 00:13	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 00:13	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.24.13 00:13	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 00:13	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 00:13	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 00:13	U	
Total BTEX		ND		0.000500	mg/L	05.24.13 00:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	80 - 120	%		
4-Bromofluorobenzene	94	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: RW002 0520B | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-007** | Date Collected: 05.20.13 17.15 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 18.54

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**994**	20.0	0.560	mg/L	05.23.13 18:54		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3320**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 20:09	U	1
Chromium	7440-47-3	**0.0145**	0.0100	0.00355	mg/L	05.29.13 20:09		1
Iron	7439-89-6	**5.78**	0.200	0.0188	mg/L	05.29.13 20:09		1
Manganese	7439-96-5	**0.854**	0.0200	0.00291	mg/L	05.29.13 20:09		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.21.13 09:30	U	10

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **RW002 0520B** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-007** | Date Collected: 05.20.13 17.15 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 23:52	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 23:52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 23:52	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 23:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	106	70 - 135	%		
o-Terphenyl	117	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 04:15	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 04:15	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 04:15	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 04:15	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 04:15	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 04:15	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 04:15	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	88	80 - 120	%		
4-Bromofluorobenzene	110	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW26 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-008** | Date Collected: 05.20.13 16.00 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 19.16

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**485**	20.0	0.560	mg/L	05.23.13 19:16		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2110**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 20:15	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.29.13 20:15	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.29.13 20:15	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 20:15	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW26 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-008** | Date Collected: 05.20.13 16.00 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.24.13 00:18	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.24.13 00:18	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.24.13 00:18	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.24.13 00:18	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	111	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 02:05	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 02:05	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 02:05	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 02:05	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 02:05	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 02:05	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 02:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	85	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW28 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-009** | Date Collected: 05.20.13 09.40 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 19.38

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**224**	10.0	0.280	mg/L	05.23.13 19:38		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1240**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0199**	0.0200	0.00756	mg/L	05.29.13 20:21	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.29.13 20:21	U	1
Iron	7439-89-6	**0.0300**	0.200	0.0188	mg/L	05.29.13 20:21	BJ	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 20:21	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914779 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW28 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-009** | Date Collected: 05.20.13 09.40 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 19:33	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 19:33	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 19:33	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 19:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	123	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 02:21	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 02:21	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 02:21	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 02:21	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 02:21	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 02:21	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 02:21	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	97	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW32 052013** Matrix: Water Sample Depth:

Lab Sample Id: **463472-010** Date Collected: 05.20.13 11.00 Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914766 Date Prep: 05.23.13 20.21

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**226**	10.0	0.280	mg/L	05.23.13 20:21		10

Analytical Method: **TDS by SM2540C** Prep Method:

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914783 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**959**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** Prep Method: 3010A

Analyst: KUG % Moist: Tech: KUG

Seq Number: 914960 Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 20:39	U	1
Chromium	7440-47-3	**0.00705**	0.0100	0.00355	mg/L	05.29.13 20:39	J	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.29.13 20:39	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 20:39	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914779 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW32 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-010** | Date Collected: 05.20.13 11.00 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 18:23	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 18:23	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 18:23	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 18:23	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	123	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 02:38	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 02:38	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 02:38	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 02:38	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 02:38	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 02:38	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 02:38	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	84	80 - 120	%		
4-Bromofluorobenzene	86	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW33 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-011** | Date Collected: 05.20.13 12.10 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 20.43

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**447**	10.0	0.280	mg/L	05.23.13 20:43		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1450**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 20:44	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.29.13 20:44	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.29.13 20:44	U	1
Manganese	7439-96-5	**0.683**	0.0200	0.00291	mg/L	05.29.13 20:44		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914785 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0165**	0.0100	0.00500	mg/L	05.21.13 09:30		1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW33 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-011** | Date Collected: 05.20.13 12.10 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 18:50	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 18:50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 18:50	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 18:50	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0335**	0.00100	0.000500	mg/L	05.24.13 10:34		1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 10:34	U	1
Ethylbenzene	100-41-4	**0.0133**	0.00100	0.000700	mg/L	05.24.13 10:34		1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 10:34	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 10:34	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 10:34	U	
Total BTEX		**0.0468**		0.000500	mg/L	05.24.13 10:34		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	80 - 120	%		
4-Bromofluorobenzene	88	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW27 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-012** | Date Collected: 05.20.13 14.05 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 21.04

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**92.4**	10.0	0.280	mg/L	05.23.13 21:04		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1170**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 20:50	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.29.13 20:50	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.29.13 20:50	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 20:50	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914785 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW27 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-012** | Date Collected: 05.20.13 14.05 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 19:17	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 19:17	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 19:17	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 19:17	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	105	70 - 135	%		
o-Terphenyl	116	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 03:26	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 03:26	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 03:26	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 03:26	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 03:26	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 03:26	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 03:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	86	80 - 120	%		
4-Bromofluorobenzene	88	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW23A 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-013** | Date Collected: 05.20.13 17.25 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 21.26

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**45.1**	5.00	0.140	mg/L	05.23.13 21:26		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**473**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0189**	0.0200	0.00756	mg/L	05.29.13 20:56	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.29.13 20:56	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.29.13 20:56	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 20:56	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914785 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW23A 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-013** | Date Collected: 05.20.13 17.25 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 20:10	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 20:10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 20:10	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 20:10	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	107	70 - 135	%		
o-Terphenyl	119	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 12:12	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 12:12	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.24.13 12:12	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 12:12	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 12:12	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 12:12	U	
Total BTEX		ND		0.000500	mg/L	05.24.13 12:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	104	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: Trip Blank | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-014** | Date Collected: 05.20.13 00.00 | Date Received: 05.21.13 10.00

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 01:49	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 01:49	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 01:49	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 01:49	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 01:49	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 01:49	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 01:49	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	113	80 - 120	%		
4-Bromofluorobenzene	91	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: DUP5 052013 | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-015** | Date Collected: 05.20.13 00.00 | Date Received: 05.21.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 21.48

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**46.5**	5.00	0.140	mg/L	05.23.13 21:48		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914783 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**494**	5.00	5.00	mg/L	05.23.13 14:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: KUG | % Moist: | Tech: KUG

Seq Number: 914960 | Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 | Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0188**	0.0200	0.00756	mg/L	05.29.13 21:02	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.29.13 21:02	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.29.13 21:02	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 21:02	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914785 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **DUP5 052013** | Matrix: Water | Sample Depth:

Lab Sample Id: **463472-015** | Date Collected: 05.20.13 00.00 | Date Received: 05.21.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 20:36	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 20:36	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 20:36	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 20:36	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	109	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 03:59	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 03:59	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 03:59	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 03:59	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 03:59	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 03:59	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 03:59	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	88	80 - 120	%		
4-Bromofluorobenzene	103	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638543-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638543-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 23:22	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 23:22	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 23:22	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 23:22	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 23:22	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	115	80 - 120	%		
4-Bromofluorobenzene	93	80 - 120	%		

Sample Id: 638611-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638611-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 11:44	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 11:44	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 11:44	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	116	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638618-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638618-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 19:51	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 19:51	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 19:51	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 19:51	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 19:51	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	108	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Sample Id: 638628-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638628-1-BLK** | Date Collected: | Date Received:

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914553 | Date Prep: 05.23.13 11.00

Prep seq: 638628

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.23.13 14:57	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.23.13 14:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638739-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638739-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914800 Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 13:40	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 13:40	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 13:40	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 13:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	116	70 - 135	%		
o-Terphenyl	129	70 - 135	%		

Sample Id: 638754-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638754-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** Prep Method: 3010A

Analyst: KUG % Moist: Tech: KUG

Seq Number: 914960 Date Prep: 05.28.13 12.00

Subcontractor: SUB: E871002 Prep seq: 638754

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.29.13 18:17	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.29.13 18:17	U	1
Iron	7439-89-6	**0.0226**	0.200	0.0188	mg/L	05.29.13 18:17	J	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.29.13 18:17	U	1

Sample Id: 638787-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638787-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914766 Date Prep: 05.23.13 13.55

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.23.13 13:55	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **638952-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **638952-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 915030 Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 14:07	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 14:07	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 14:07	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 14:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	126	70 - 135	%		

Sample Id: **914779-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914779-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914779 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Sample Id: **914783-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: **914783-1-BLK** Date Collected: Date Received:

Analytical Method: **TDS by SM2540C** Prep Method:

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914783 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.23.13 14:00	U	1

Certificate of Analytical Results 463472

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **914785-1-BLK** | Matrix: Water | Sample Depth:

Lab Sample Id: **914785-1-BLK** | Date Collected: | Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914785 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.21.13 09:30	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463472, **Project ID:** 073018

Lab Batch #: 914531 **Sample:** 638611-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 13:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0353	0.0300	118	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463472, **Project ID:** 073018

Lab Batch #: 914534 **Sample:** 638618-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 19:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914534 **Sample:** 638618-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 19:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 914534 **Sample:** 638618-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 19:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 914534 **Sample:** 463662-011 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 22:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 914534 **Sample:** 463662-011 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 22:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463472, **Project ID:** 073018

Lab Batch #: 914538 **Sample:** 638543-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 22:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 914538 **Sample:** 638543-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 23:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 914538 **Sample:** 638543-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 23:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 914538 **Sample:** 463584-005 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 00:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0354	0.0300	118	80-120	

Lab Batch #: 914538 **Sample:** 463584-005 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 01:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0344	0.0300	115	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463472, **Project ID:** 073018

Lab Batch #: 914553 **Sample:** 638628-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.3	10.0	103	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 12:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	10.0	121	70-135	
o-Terphenyl	5.98	5.00	120	70-135	

Lab Batch #: 914553 **Sample:** 638628-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.06	5.00	121	70-135	

Lab Batch #: 914553 **Sample:** 463335-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 21:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.33	5.00	127	70-135	

Lab Batch #: 914800 **Sample:** 638739-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/28/13 11:46

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.38	5.00	128	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463472, **Project ID:** 073018

Lab Batch #: 914800 **Sample:** 638739-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/28/13 13:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.0	10.0	110	70-135	
o-Terphenyl	6.43	5.00	129	70-135	

Lab Batch #: 914800 **Sample:** 638739-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/28/13 13:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.6	10.0	116	70-135	
o-Terphenyl	6.47	5.00	129	70-135	

Lab Batch #: 914800 **Sample:** 463584-002 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/29/13 00:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.7	10.0	117	70-135	
o-Terphenyl	6.38	5.00	128	70-135	

Lab Batch #: 915030 **Sample:** 638952-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 13:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.2	10.0	102	70-135	
o-Terphenyl	6.30	5.00	126	70-135	

Lab Batch #: 915030 **Sample:** 638952-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 13:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.9	10.0	109	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463472, **Project ID:** 073018

Lab Batch #: 915030 **Sample:** 638952-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 14:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.31	5.00	126	70-135	

Lab Batch #: 915030 **Sample:** 463662-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 23:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.1	10.0	111	70-135	
o-Terphenyl	6.50	5.00	130	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463472 **Project ID:** 073018

Lab Batch #: 914779 **Sample:** 914779-1-BKS **Matrix:** Water
Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0236	94	80-120	

Lab Batch #: 914785 **Sample:** 914785-1-BKS **Matrix:** Water
Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0230	92	80-120	

Lab Batch #: 914783 **Sample:** 914783-1-BKS **Matrix:** Water
Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	910	91	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463472 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/22/2013 **Date Analyzed:** 05/22/2013

Lab Batch ID: 914538 **Sample:** 638543-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0858	86	0.100	0.100	100	15	70-125	25	
Toluene	<0.00100	0.100	0.102	102	0.100	0.111	111	8	70-125	25	
Ethylbenzene	<0.000700	0.100	0.109	109	0.100	0.119	119	9	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.203	102	0.200	0.216	108	6	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.108	108	0	71-133	25	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914531 **Sample:** 638611-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0931	93	0.100	0.0967	97	4	70-125	25	
Toluene	<0.00100	0.100	0.119	119	0.100	0.105	105	13	70-125	25	
Ethylbenzene	<0.000700	0.100	0.118	118	0.100	0.113	113	4	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.228	114	0.200	0.216	108	5	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.105	105	3	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463472 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914534 **Sample:** 638618-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.118	118	0.100	0.116	116	2	70-125	25	
Toluene	<0.00100	0.100	0.120	120	0.100	0.120	120	0	70-125	25	
Ethylbenzene	<0.000700	0.100	0.119	119	0.100	0.118	118	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.234	117	0.200	0.235	118	0	70-131	25	
o-Xylene	<0.000700	0.100	0.119	119	0.100	0.119	119	0	71-133	25	

Analyst: KUG **Date Prepared:** 05/28/2013 **Date Analyzed:** 05/29/2013

Lab Batch ID: 914960 **Sample:** 638754-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.996	100	1.00	0.980	98	2	80-120	20	
Chromium	<0.00355	1.00	1.00	100	1.00	0.982	98	2	80-120	20	
Iron	0.0226	5.00	4.92	98	5.00	4.89	98	1	80-120	20	
Manganese	<0.00291	1.00	0.981	98	1.00	0.964	96	2	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463472 **Project ID:** 073018

Analyst: AMB **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914766 **Sample:** 638787-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.5	102	25.0	25.7	103	1	80-120	20	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914553 **Sample:** 638628-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	109	109	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	115	115	100	112	112	3	70-135	25	

Analyst: DYV **Date Prepared:** 05/24/2013 **Date Analyzed:** 05/28/2013

Lab Batch ID: 914800 **Sample:** 638739-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	116	116	100	114	114	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	123	123	100	123	123	0	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463472
Project ID: 073018
Analyst: DYV
Date Prepared: 05/30/2013
Date Analyzed: 05/30/2013
Lab Batch ID: 915030
Sample: 638952-1-BKS
Batch #: 1
Matrix: Water
Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	102	102	8	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	116	116	100	108	108	7	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463472

Lab Batch #: 914766 **Project ID:** 073018

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** AMB

QC- Sample ID: 463472-009 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	224	250	487	105	80-120	

Lab Batch #: 914766

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** AMB

QC- Sample ID: 463584-013 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	88.5	125	216	102	80-120	

Lab Batch #: 914553

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

QC- Sample ID: 463335-003 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	106	106	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	114	114	70-135	

Lab Batch #: 914800

Date Analyzed: 05/29/2013 **Date Prepared:** 05/24/2013 **Analyst:** DYV

QC- Sample ID: 463584-002 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	117	117	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	125	125	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463472
Lab Batch #: 915030
Date Analyzed: 05/30/2013
QC- Sample ID: 463662-001 S
Reporting Units: mg/L

Project ID: 073018
Date Prepared: 05/30/2013
Analyst: DYV
Batch #: 1
Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	98.1	98	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	107	107	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463472 **Project ID:** 073018

Lab Batch ID: 914531 **QC- Sample ID:** 463584-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.111	111	0.100	0.105	105	6	70-125	25	
Toluene	<0.00100	0.100	0.111	111	0.100	0.112	112	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.119	119	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.224	112	0.200	0.221	111	1	70-131	25	
o-Xylene	<0.000700	0.100	0.111	111	0.100	0.106	106	5	71-133	25	

Lab Batch ID: 914534 **QC- Sample ID:** 463662-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.117	117	0.100	0.101	101	15	70-125	25	
Toluene	<0.00100	0.100	0.114	114	0.100	0.103	103	10	70-125	25	
Ethylbenzene	<0.000700	0.100	0.115	115	0.100	0.113	113	2	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.238	119	0.200	0.209	105	13	70-131	25	
o-Xylene	<0.000700	0.100	0.114	114	0.100	0.103	103	10	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463472 **Project ID:** 073018

Lab Batch ID: 914538 **QC- Sample ID:** 463584-005 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/22/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0896	90	0.100	0.0869	87	3	70-125	25	
Toluene	<0.00100	0.100	0.0960	96	0.100	0.0884	88	8	70-125	25	
Ethylbenzene	<0.000700	0.100	0.106	106	0.100	0.0992	99	7	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.197	99	0.200	0.182	91	8	70-131	25	
o-Xylene	<0.000700	0.100	0.0986	99	0.100	0.0975	98	1	71-133	25	

Lab Batch ID: 914779 **QC- Sample ID:** 463472-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.0433	0.250	0.294	100	0.250	0.295	101	0	80-120	20	

Lab Batch ID: 914785 **QC- Sample ID:** 463472-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.0165	0.250	0.265	99	0.250	0.264	99	0	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463472 **Project ID:** 073018

Lab Batch ID: 914960 **QC- Sample ID:** 463512-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/29/2013 **Date Prepared:** 05/28/2013 **Analyst:** KUG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.0378	5.00	4.82	96	5.00	5.18	104	7	75-125	20	
Chromium	<0.0177	5.00	4.63	93	5.00	4.93	99	6	75-125	20	
Iron	46.3	25.0	69.9	94	25.0	81.2	140	15	75-125	20	X
Manganese	5.89	5.00	10.7	96	5.00	12.2	126	13	75-125	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463472

Lab Batch #: 914785 **Project ID:** 073018
Date Analyzed: 05/21/2013 09:30 **Date Prepared:** 05/21/2013 **Analyst:** WRU
QC- Sample ID: 463472-011 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Chromium, Hexavalent by SW 7196A Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Hexavalent Chromium	0.0165	0.0165	0	20	

Lab Batch #: 914783
Date Analyzed: 05/23/2013 14:00 **Date Prepared:** 05/23/2013 **Analyst:** AMB
QC- Sample ID: 463472-008 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2110	2040	3	30	

Lab Batch #: 914783
Date Analyzed: 05/23/2013 14:00 **Date Prepared:** 05/23/2013 **Analyst:** AMB
QC- Sample ID: 463544-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	328	322	2	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☐ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322822 Page 1 of 2

Company-City CRA - Midland **Phone** 432-686-0086

Lab Only: 463472

Project Name-Location N. Ennie ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM) mike wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0180

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' In" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	method 8021B BTEX	Diss metals method 6010B	TDS Sm2540C	Chlorides E300	TPH GRO + DRO 8015 mod	Hex chrome 7196A				TATASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	MW8M052013	5-20-13	955		W		X	7													X	X	XX	X	X												1
2	RW004A052013		1045																																		2
3	MW47052013		1215																																		3
4	MW11A052013		1450																																		4
5	MW11052013		1540																																		5
6	MW11M052013		1615																																		6
7	~~RW004~~ RW00205203		1715																																		7
8	MW26052013		1600																																		8
9	MW28052013		940																																		9
10	MW32052013		1100																																		10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1)	5-20-13 1830	2) SHOKAI KONDMA	1814
2) 3)		4)	5/20/13
3) 5)		6) Shaune Smith	5/21/13 10:00

Total Containers per COC: 7 Cooler Temp: 1.5 °C

Remarks

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

XENCO Laboratories

☐ 4143 Greenbriar Drive, Stafford, TX 77477 **281-240-4200**
☐ 5332, Blackberry Drive, San Antonio, TX 78238 **210-509-3334**
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 **214-902-0300**
☒ 12600 West I-20 East, Odessa, TX 79765 **432-563-1800**

Serial #: 322889 Page 2 of 2

Company-City CRA Midland **Phone** 432-686-0086

Lab Only: 463472

Project Name-Location N. Ennis ☐ Previously done at XENCO **Project ID** 073018

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other **Proj. Manager (PM)** Mike Wisniowiecki

E-mail Results to ☒ PM and **Fax No:** 432-686-0186

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to:

Quote/Pricing: **P.O. No:** ☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW **TRRP**
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)

Sampler Name Justin Nixon **Signature**

	Sample ID	Sampling Date	Time	Depth ft' in" m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	VOA: Full-List BTEX-MTBE EtOH Oxyg VOHs VOAs	VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other:	PAHs SIM 8310 8270	TX-1005 DRO GRO MA EPH MA VPH	SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL	OC Pesticides PCBs Herbicides OP Pesticides	Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2	SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)	EDB / DBCP	Method 8021 B BTEX	Diss metals method 6010B	TDS SM 2540C	Chlorides E300	TPH BRO tDRO 8015mod	Hex chrome 7196A				TAT ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Samples (Surcharges will apply and are pre-approved)	Remarks: Sample Clean-ups are pre-approved as needed			Addn: Date Rcv. by: From:	
1	mw33052013	5-20-13	1210		W		X	7													X	X	X	X	X	X											1
2	mw27052013		1405					7													X	X	X	X	X	X											2
3	mw23405 2013		1725					7													X	X	X	X	X	X											3
4	Trip Blank		—					2													X																4
5	Dup5 052013		—					7													X	X	X	X	X	X											5
6																																					6
7																																					7
8																																					8
9																																					9
10																																					10

	Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1	1)	5-20-13 1530	2) SHOICH KoJUMA	5/20/13 1:30 pm
2	3)		4)	
3	5)		6)	

Total Containers per COC: 30 Cooler Temp: 1.5 °C

Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (**V**), HCl pH<2 (**H**), H2SO4 pH<2 (**S**), HNO3 pH<2 (**N**), Asbc Acid&NaOH (**A**), ZnAc&NaOH (**Z**), (Cool, <4C) (**C**), None (**NA**),See Label (**L**), Other (**O**) _____
Cont. Size: 4oz (**4**), 8oz (**8**), 32oz (**32**), 40ml VOA (**40**), 1L (**1**), 500ml (**5**), Tedlar Bag (**B**), Various (**V**), Other _____ **Cont. Type:** Glass Amb (**A**), Glass Clear (**C**), Plastic (**P**), Various (**V**)

Matrix: Air (**A**), Product (**P**), Solid (**S**), Water (**W**), Liquid (**L**)

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/21/2013 10:00:00 AM

Work Order #: 463472

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/21/2013

Checklist reviewed by: Kelsey Brooks Date: 05/21/2013

Analytical Report 463584

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

03-JUN-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

03-JUN-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463584**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463584. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463584 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
IW001 052113	W	05-21-13 09:30		463584-001
MW2A 052113	W	05-21-13 10:35		463584-002
MW2 052113	W	05-21-13 11:15		463584-003
MW1 052113	W	05-21-13 13:50		463584-004
MW39A 052113	W	05-21-13 14:35		463584-005
MW22A 052113	W	05-21-13 15:40		463584-006
MW46 052113	W	05-21-13 17:15		463584-007
MW23 052113	W	05-21-13 10:05		463584-008
MW59 052113	W	05-21-13 11:35		463584-009
MW12M 052113	W	05-21-13 13:45		463584-010
MW88M 052113	W	05-21-13 14:45		463584-011
MW12 052113	W	05-21-13 16:25		463584-012
MW12A 052113	W	05-21-13 17:25		463584-013
TRIP BLANK	W	05-21-13 00:00		463584-014

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*03-JUN-13*
Work Order Number(s):	*463584*	Date Received:	*05/22/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-914984 Dissolved Metals per ICP by SW846 6010B
SW6010B

Batch 914984, Iron detected in the blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 463584-007, -003, -009, -008, -013, -005, -010, -002, -011, -004, -006, -012, -001.

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW001 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-001** | Date Collected: 05.21.13 09.30 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 07.47

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**963**	50.0	1.40	mg/L	05.23.13 07:47		50

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**5700**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0582**	0.0200	0.00756	mg/L	05.30.13 08:18		1
Chromium	7440-47-3	**0.0241**	0.0100	0.00355	mg/L	05.30.13 08:18		1
Iron	7439-89-6	**3.59**	0.200	0.0188	mg/L	05.30.13 08:18		1
Manganese	7439-96-5	**1.78**	0.0200	0.00291	mg/L	05.30.13 08:18		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.200	0.100	mg/L	05.22.13 09:25	U	20

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: IW001 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-001** | Date Collected: 05.21.13 09.30 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 19:59	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 19:59	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 19:59	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 19:59	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	114	70 - 135	%		
o-Terphenyl	129	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 09:22	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 09:22	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.24.13 09:22	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 09:22	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 09:22	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 09:22	U	
Total BTEX		ND		0.000500	mg/L	05.24.13 09:22	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	85	80 - 120	%		
4-Bromofluorobenzene	89	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW2A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-002** | Date Collected: 05.21.13 10.35 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 08.09

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**346**	10.0	0.280	mg/L	05.23.13 08:09		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1180**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.00953**	0.0200	0.00756	mg/L	05.30.13 08:25	J	1
Chromium	7440-47-3	**0.0205**	0.0100	0.00355	mg/L	05.30.13 08:25		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.30.13 08:25	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.30.13 08:25	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0168**	0.0100	0.00500	mg/L	05.22.13 09:25		1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW2A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-002** | Date Collected: 05.21.13 10.35 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 21:27	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 21:27	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 21:27	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 21:27	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	113	70 - 135	%		
o-Terphenyl	126	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 23:38	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 23:38	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 23:38	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 23:38	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 23:38	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.22.13 23:38	U	
Total BTEX		ND		0.000500	mg/L	05.22.13 23:38	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	88	80 - 120	%		
4-Bromofluorobenzene	85	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW2 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-003** | Date Collected: 05.21.13 11.15 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 08.31

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1130**	20.0	0.560	mg/L	05.23.13 08:31		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4130**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0120**	0.0200	0.00756	mg/L	05.30.13 08:30	J	1
Chromium	7440-47-3	**0.0452**	0.0100	0.00355	mg/L	05.30.13 08:30		1
Iron	7439-89-6	**0.0643**	0.200	0.0188	mg/L	05.30.13 08:30	BJ	1
Manganese	7439-96-5	**0.00403**	0.0200	0.00291	mg/L	05.30.13 08:30	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0475**	0.0100	0.00500	mg/L	05.22.13 09:25		1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW2 052113** | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-003** | Date Collected: 05.21.13 11.15 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 21:53	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 21:53	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 21:53	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 21:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	109	70 - 135	%		
o-Terphenyl	122	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 23:55	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 23:55	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 23:55	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 23:55	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 23:55	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.22.13 23:55	U	
Total BTEX		ND		0.000500	mg/L	05.22.13 23:55	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	117	80 - 120	%		
4-Bromofluorobenzene	102	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW1 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-004** | Date Collected: 05.21.13 13.50 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 09.14

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**127**	20.0	0.560	mg/L	05.23.13 09:14		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2780**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.30.13 08:37	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.30.13 08:37	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.30.13 08:37	U	1
Manganese	7439-96-5	**2.60**	0.0200	0.00291	mg/L	05.30.13 08:37		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.22.13 09:25	U	1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW1 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-004** | Date Collected: 05.21.13 13.50 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 22:19	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 22:19	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 22:19	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 22:19	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	106	70 - 135	%		
o-Terphenyl	116	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 10:17	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 10:17	U	1
Ethylbenzene	100-41-4	**0.00661**	0.00100	0.000700	mg/L	05.24.13 10:17		1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 10:17	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 10:17	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 10:17	U	
Total BTEX		**0.00661**		0.000500	mg/L	05.24.13 10:17		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	80 - 120	%		
4-Bromofluorobenzene	82	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW39A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-005** | Date Collected: 05.21.13 14.35 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 09.36

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**186**	10.0	0.280	mg/L	05.23.13 09:36		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1030**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0133**	0.0200	0.00756	mg/L	05.30.13 08:42	J	1
Chromium	7440-47-3	**0.101**	0.0100	0.00355	mg/L	05.30.13 08:42		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.30.13 08:42	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.30.13 08:42	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0989**	0.0100	0.00500	mg/L	05.22.13 09:25		1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW39A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-005** | Date Collected: 05.21.13 14.35 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 22:44	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 22:44	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 22:44	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 22:44	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	108	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 00:27	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 00:27	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 00:27	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 00:27	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 00:27	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 00:27	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 00:27	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	96	80 - 120	%		
4-Bromofluorobenzene	96	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW22A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-006** | Date Collected: 05.21.13 15.40 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 09.57

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**59.6**	5.00	0.140	mg/L	05.23.13 09:57		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**412**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.30.13 08:48	U	1
Chromium	7440-47-3	**0.0389**	0.0100	0.00355	mg/L	05.30.13 08:48		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.30.13 08:48	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.30.13 08:48	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.0348**	0.0100	0.00500	mg/L	05.22.13 09:25		1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW22A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-006** | Date Collected: 05.21.13 15.40 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 20:25	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 20:25	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 20:25	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 20:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	94	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 01:16	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 01:16	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 01:16	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 01:16	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 01:16	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 01:16	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 01:16	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	87	80 - 120	%		
4-Bromofluorobenzene	92	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW46 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-007** | Date Collected: 05.21.13 17.15 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 10.19

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**307**	10.0	0.280	mg/L	05.23.13 10:19		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**1440**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0234**	0.0200	0.00756	mg/L	05.30.13 08:54		1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.30.13 08:54	U	1
Iron	7439-89-6	**0.0690**	0.200	0.0188	mg/L	05.30.13 08:54	BJ	1
Manganese	7439-96-5	**0.741**	0.0200	0.00291	mg/L	05.30.13 08:54		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.22.13 09:25	U	10

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW46 052113** | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-007** | Date Collected: 05.21.13 17.15 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	**1.84**	1.50	0.988	mg/L	05.30.13 20:51		1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**1.08**	1.50	0.988	mg/L	05.30.13 20:51	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 20:51	U	1
Total TPH	PHC635	**2.92**		0.988	mg/L	05.30.13 20:51		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	96	70 - 135	%		
o-Terphenyl	107	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.0520**	0.00100	0.000500	mg/L	05.23.13 04:32		1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 04:32	U	1
Ethylbenzene	100-41-4	**0.140**	0.00100	0.000700	mg/L	05.23.13 04:32		1
m,p-Xylenes	179601-23-1	**0.0300**	0.00200	0.00140	mg/L	05.23.13 04:32		1
o-Xylene	95-47-6	**0.0393**	0.00100	0.000700	mg/L	05.23.13 04:32		1
Total Xylenes	1330-20-7	**0.0693**		0.000700	mg/L	05.23.13 04:32		
Total BTEX		**0.261**		0.000500	mg/L	05.23.13 04:32		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	80	80 - 120	%		
4-Bromofluorobenzene	97	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW23 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-008** | Date Collected: 05.21.13 10.05 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 11.24

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**767**	20.0	0.560	mg/L	05.23.13 11:24		20

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**3500**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.30.13 09:00	U	1
Chromium	7440-47-3	**1.11**	0.0100	0.00355	mg/L	05.30.13 09:00		1
Iron	7439-89-6	**0.0517**	0.200	0.0188	mg/L	05.30.13 09:00	BJ	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.30.13 09:00	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.958**	0.100	0.0500	mg/L	05.22.13 09:25		10

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW23 052113** | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-008** | Date Collected: 05.21.13 10.05 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.31.13 15:26	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.31.13 15:26	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.31.13 15:26	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.31.13 15:26	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	126	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 01:32	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 01:32	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 01:32	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 01:32	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 01:32	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 01:32	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 01:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	80 - 120	%		
4-Bromofluorobenzene	113	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW59 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-009** | Date Collected: 05.21.13 11.35 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 11.45

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**428**	10.0	0.280	mg/L	05.23.13 11:45		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2120**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0153**	0.0200	0.00756	mg/L	05.30.13 09:18	J	1
Chromium	7440-47-3	**0.107**	0.0100	0.00355	mg/L	05.30.13 15:58		1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.30.13 09:18	U	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.30.13 09:18	U	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	**0.104**	0.0100	0.00500	mg/L	05.22.13 09:25		1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **MW59 052113** | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-009** | Date Collected: 05.21.13 11.35 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914808 | Date Prep: 05.24.13 15.30

Prep seq: 638742

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.29.13 04:17	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.29.13 04:17	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.29.13 04:17	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.29.13 04:17	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	115	70 - 135	%		
o-Terphenyl	128	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 09:00	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 09:00	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.24.13 09:00	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 09:00	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 09:00	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 09:00	U	
Total BTEX		ND		0.000500	mg/L	05.24.13 09:00	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	80 - 120	%		
4-Bromofluorobenzene	91	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW12M 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-010** | Date Collected: 05.21.13 13.45 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 12.07

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**744**	50.0	1.40	mg/L	05.23.13 12:07		50

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**4900**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0870**	0.0200	0.00756	mg/L	05.30.13 09:24		1
Chromium	7440-47-3	**0.0444**	0.0100	0.00355	mg/L	05.30.13 09:24		1
Iron	7439-89-6	**10.1**	0.200	0.0188	mg/L	05.30.13 09:24		1
Manganese	7439-96-5	**0.142**	0.0200	0.00291	mg/L	05.30.13 09:24		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914807 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.22.13 09:25	U	10

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW12M 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-010** | Date Collected: 05.21.13 13.45 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914808 | Date Prep: 05.24.13 15.30

Prep seq: 638742

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.29.13 04:43	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.29.13 04:43	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.29.13 04:43	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.29.13 04:43	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	116	70 - 135	%		
o-Terphenyl	130	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 01:50	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 01:50	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.24.13 01:50	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 01:50	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 01:50	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 01:50	U	
Total BTEX		ND		0.000500	mg/L	05.24.13 01:50	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	80 - 120	%		
4-Bromofluorobenzene	85	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW88M 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-011** | Date Collected: 05.21.13 14.45 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 12.29

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**809**	50.0	1.40	mg/L	05.23.13 12:29		50

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**7040**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0825**	0.0200	0.00756	mg/L	05.30.13 09:30		1
Chromium	7440-47-3	**0.143**	0.0500	0.0177	mg/L	05.30.13 16:10		5
Iron	7439-89-6	**32.3**	0.200	0.0188	mg/L	05.30.13 09:30		1
Manganese	7439-96-5	**13.2**	0.0200	0.00291	mg/L	05.30.13 09:30		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914820 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.200	0.100	mg/L	05.22.13 09:25	U	20

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW88M 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-011** | Date Collected: 05.21.13 14.45 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	**11.6**	1.50	0.988	mg/L	05.30.13 21:42		1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	**0.999**	1.50	0.988	mg/L	05.30.13 21:42	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 21:42	U	1
Total TPH	PHC635	**12.6**		0.988	mg/L	05.30.13 21:42		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	119	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.24.13 02:23	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.24.13 02:23	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.24.13 02:23	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.24.13 02:23	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.24.13 02:23	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.24.13 02:23	U	
Total BTEX		ND		0.000500	mg/L	05.24.13 02:23	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	90	80 - 120	%		
4-Bromofluorobenzene	107	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW12 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-012** | Date Collected: 05.21.13 16.25 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914529 | Date Prep: 05.23.13 12.50

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**399**	10.0	0.280	mg/L	05.23.13 12:50		10

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**2050**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.30.13 09:36	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.30.13 16:15	U	1
Iron	7439-89-6	**0.0536**	0.200	0.0188	mg/L	05.30.13 09:36	BJ	1
Manganese	7439-96-5	**5.81**	0.0200	0.00291	mg/L	05.30.13 09:36		1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914820 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.100	0.0500	mg/L	05.22.13 09:25	U	10

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW12 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-012** | Date Collected: 05.21.13 16.25 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914808 | Date Prep: 05.24.13 15.30

Prep seq: 638742

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.29.13 05:34	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.29.13 05:34	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.29.13 05:34	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.29.13 05:34	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	120	70 - 135	%		
o-Terphenyl	128	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 13:06	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 13:06	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 13:06	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 13:06	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 13:06	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 13:06	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 13:06	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	89	80 - 120	%		
4-Bromofluorobenzene	84	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW12A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-013** | Date Collected: 05.21.13 17.25 | Date Received: 05.22.13 10.00

Analytical Method: **Inorganic Anions by EPA 300/300.1** | Prep Method: E300P

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914766 | Date Prep: 05.23.13 15.00

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**88.5**	5.00	0.140	mg/L	05.23.13 15:00		5

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	**503**	5.00	5.00	mg/L	05.28.13 11:00		1

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** | Prep Method: 3010A

Analyst: MKO | % Moist: | Tech: MKO

Seq Number: 914984 | Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 | Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	**0.0117**	0.0200	0.00756	mg/L	05.30.13 09:42	J	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.30.13 16:21	U	1
Iron	7439-89-6	ND	0.200	0.0188	mg/L	05.30.13 09:42	U	1
Manganese	7439-96-5	**0.00514**	0.0200	0.00291	mg/L	05.30.13 09:42	J	1

Analytical Method: **Chromium, Hexavalent by SW 7196A** | Prep Method:

Analyst: WRU | % Moist: | Tech: WRU

Seq Number: 914820 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.22.13 09:25	U	1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: MW12A 052113 | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-013** | Date Collected: 05.21.13 17.25 | Date Received: 05.22.13 10.00

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 915030 | Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 22:09	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 22:09	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 22:09	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 22:09	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	93	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 13:23	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 13:23	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 13:23	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 13:23	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 13:23	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 13:23	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 13:23	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	80 - 120	%		
4-Bromofluorobenzene	84	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: TRIP BLANK | Matrix: Water | Sample Depth:

Lab Sample Id: **463584-014** | Date Collected: 05.21.13 00.00 | Date Received: 05.22.13 10.00

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914531 | Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 13:39	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 13:39	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 13:39	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 13:39	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 13:39	U	1
Total Xylenes	1330-20-7	ND		0.000700	mg/L	05.23.13 13:39	U	
Total BTEX		ND		0.000500	mg/L	05.23.13 13:39	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	86	80 - 120	%		
4-Bromofluorobenzene	86	80 - 120	%		

Sample Id: 638543-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638543-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914538 | Date Prep: 05.22.13 16.00

Prep seq: 638543

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.22.13 23:22	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.22.13 23:22	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.22.13 23:22	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.22.13 23:22	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.22.13 23:22	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	115	80 - 120	%		
4-Bromofluorobenzene	93	80 - 120	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638611-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638611-1-BLK** Date Collected: Date Received:

Analytical Method: **BTEX by EPA 8021B** Prep Method: 5030B

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914531 Date Prep: 05.23.13 10.30

Prep seq: 638611

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 11:44	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 11:44	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 11:44	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 11:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	116	80 - 120	%		
4-Bromofluorobenzene	114	80 - 120	%		

Sample Id: 638612-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638612-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914529 Date Prep: 05.23.13 02.44

Prep seq: 638612

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.23.13 02:44	U	1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638618-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638618-1-BLK** | Date Collected: | Date Received:

Analytical Method: **BTEX by EPA 8021B** | Prep Method: 5030B

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914534 | Date Prep: 05.23.13 17.00

Prep seq: 638618

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	ND	0.00100	0.000500	mg/L	05.23.13 19:51	U	1
Toluene	108-88-3	ND	0.00200	0.00100	mg/L	05.23.13 19:51	U	1
Ethylbenzene	100-41-4	ND	0.00100	0.000700	mg/L	05.23.13 19:51	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	0.00140	mg/L	05.23.13 19:51	U	1
o-Xylene	95-47-6	ND	0.00100	0.000700	mg/L	05.23.13 19:51	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	108	80 - 120	%		
4-Bromofluorobenzene	98	80 - 120	%		

Sample Id: 638739-1-BLK | Matrix: Water | Sample Depth:

Lab Sample Id: **638739-1-BLK** | Date Collected: | Date Received:

Analytical Method: **TPH By SW8015 Mod** | Prep Method: 1005

Analyst: DYV | % Moist: | Tech: DYV

Seq Number: 914800 | Date Prep: 05.24.13 13.00

Prep seq: 638739

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.28.13 13:40	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.28.13 13:40	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.28.13 13:40	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.28.13 13:40	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	116	70 - 135	%		
o-Terphenyl	129	70 - 135	%		

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638742-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638742-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 914808 Date Prep: 05.24.13 15.30

Prep seq: 638742

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.29.13 03:01	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.29.13 03:01	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.29.13 03:01	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.29.13 03:01	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	125	70 - 135	%		

Sample Id: 638787-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638787-1-BLK** Date Collected: Date Received:

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Analyst: AMB % Moist: Tech: AMB

Seq Number: 914766 Date Prep: 05.23.13 13.55

Prep seq: 638787

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	ND	1.00	0.0280	mg/L	05.23.13 13:55	U	1

Sample Id: 638829-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638829-1-BLK** Date Collected: Date Received:

Analytical Method: **Dissolved Metals per ICP by SW846 6010B** Prep Method: 3010A

Analyst: MKO % Moist: Tech: MKO

Seq Number: 914984 Date Prep: 05.29.13 09.30

Subcontractor: SUB: E871002 Prep seq: 638829

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	ND	0.0200	0.00756	mg/L	05.30.13 06:55	U	1
Chromium	7440-47-3	ND	0.0100	0.00355	mg/L	05.30.13 06:55	U	1
Iron	7439-89-6	**0.0248**	0.200	0.0188	mg/L	05.30.13 06:55	J	1
Manganese	7439-96-5	ND	0.0200	0.00291	mg/L	05.30.13 06:55	U	1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: 638952-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **638952-1-BLK** Date Collected: Date Received:

Analytical Method: **TPH By SW8015 Mod** Prep Method: 1005

Analyst: DYV % Moist: Tech: DYV

Seq Number: 915030 Date Prep: 05.30.13 13.00

Prep seq: 638952

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	1.50	0.988	mg/L	05.30.13 14:07	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	1.50	0.988	mg/L	05.30.13 14:07	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	1.50	0.988	mg/L	05.30.13 14:07	U	1
Total TPH	PHC635	ND		0.988	mg/L	05.30.13 14:07	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	112	70 - 135	%		
o-Terphenyl	126	70 - 135	%		

Sample Id: 914807-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914807-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914807 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.22.13 09:25	U	1

Sample Id: 914820-1-BLK Matrix: Water Sample Depth:

Lab Sample Id: **914820-1-BLK** Date Collected: Date Received:

Analytical Method: **Chromium, Hexavalent by SW 7196A** Prep Method:

Analyst: WRU % Moist: Tech: WRU

Seq Number: 914820 Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Hexavalent Chromium	18540-29-9	ND	0.0100	0.00500	mg/L	05.22.13 09:25	U	1

Certificate of Analytical Results 463584

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id: **914996-1-BLK** | Matrix: Water | Sample Depth:

Lab Sample Id: **914996-1-BLK** | Date Collected: | Date Received:

Analytical Method: **TDS by SM2540C** | Prep Method:

Analyst: AMB | % Moist: | Tech: AMB

Seq Number: 914996 | Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total dissolved solids	TDS	ND	5.00	5.00	mg/L	05.28.13 11:00	U	1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463584, **Project ID:** 073018

Lab Batch #: 914531 **Sample:** 638611-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914531 **Sample:** 638611-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 11:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 13:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0353	0.0300	118	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 914531 **Sample:** 463584-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 14:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463584, **Project ID:** 073018

Lab Batch #: 914534 **Sample:** 638618-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 19:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 914534 **Sample:** 638618-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 19:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 914534 **Sample:** 638618-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 19:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 914534 **Sample:** 463662-011 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 22:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 914534 **Sample:** 463662-011 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 22:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463584, **Project ID:** 073018

Lab Batch #: 914538 **Sample:** 638543-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 22:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 914538 **Sample:** 638543-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 23:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 914538 **Sample:** 638543-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/22/13 23:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 914538 **Sample:** 463584-005 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 00:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0354	0.0300	118	80-120	

Lab Batch #: 914538 **Sample:** 463584-005 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/23/13 01:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0344	0.0300	115	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463584, **Project ID:** 073018

Lab Batch #: 914800 **Sample:** 638739-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/28/13 11:46

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.38	5.00	128	70-135	

Lab Batch #: 914800 **Sample:** 638739-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/28/13 13:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.0	10.0	110	70-135	
o-Terphenyl	6.43	5.00	129	70-135	

Lab Batch #: 914800 **Sample:** 638739-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/28/13 13:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.6	10.0	116	70-135	
o-Terphenyl	6.47	5.00	129	70-135	

Lab Batch #: 914800 **Sample:** 463584-002 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/29/13 00:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.7	10.0	117	70-135	
o-Terphenyl	6.38	5.00	128	70-135	

Lab Batch #: 914808 **Sample:** 638742-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/29/13 02:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.5	10.0	115	70-135	
o-Terphenyl	4.77	5.00	95	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463584, **Project ID:** 073018

Lab Batch #: 914808 **Sample:** 638742-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/29/13 02:35

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.0	10.0	120	70-135	
o-Terphenyl	6.36	5.00	127	70-135	

Lab Batch #: 914808 **Sample:** 638742-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/29/13 03:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.23	5.00	125	70-135	

Lab Batch #: 914808 **Sample:** 463584-012 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/29/13 13:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.4	10.0	114	70-135	
o-Terphenyl	6.34	5.00	127	70-135	

Lab Batch #: 915030 **Sample:** 638952-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 13:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.2	10.0	102	70-135	
o-Terphenyl	6.30	5.00	126	70-135	

Lab Batch #: 915030 **Sample:** 638952-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 13:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.9	10.0	109	70-135	
o-Terphenyl	6.17	5.00	123	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North Eunice

Work Orders : 463584, **Project ID:** 073018

Lab Batch #: 915030 **Sample:** 638952-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 14:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	6.31	5.00	126	70-135	

Lab Batch #: 915030 **Sample:** 463662-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/30/13 23:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.1	10.0	111	70-135	
o-Terphenyl	6.50	5.00	130	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North Eunice

Work Order #: 463584 **Project ID:** 073018

Lab Batch #: 914807 **Sample:** 914807-1-BKS **Matrix:** Water
Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0242	97	80-120	

Lab Batch #: 914820 **Sample:** 914820-1-BKS **Matrix:** Water
Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Hexavalent Chromium	<0.00500	0.0250	0.0216	86	80-120	

Lab Batch #: 914996 **Sample:** 914996-1-BKS **Matrix:** Water
Date Analyzed: 05/28/2013 **Date Prepared:** 05/28/2013 **Analyst:** AMB
Reporting Units: mg/L **Batch #:** 1 **BLANK /BLANK SPIKE RECOVERY STUDY**

TDS by SM2540C Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	1010	101	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463584 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/22/2013 **Date Analyzed:** 05/22/2013

Lab Batch ID: 914538 **Sample:** 638543-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0858	86	0.100	0.100	100	15	70-125	25	
Toluene	<0.00100	0.100	0.102	102	0.100	0.111	111	8	70-125	25	
Ethylbenzene	<0.000700	0.100	0.109	109	0.100	0.119	119	9	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.203	102	0.200	0.216	108	6	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.108	108	0	71-133	25	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914531 **Sample:** 638611-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0931	93	0.100	0.0967	97	4	70-125	25	
Toluene	<0.00100	0.100	0.119	119	0.100	0.105	105	13	70-125	25	
Ethylbenzene	<0.000700	0.100	0.118	118	0.100	0.113	113	4	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.228	114	0.200	0.216	108	5	70-131	25	
o-Xylene	<0.000700	0.100	0.108	108	0.100	0.105	105	3	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463584 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914534 **Sample:** 638618-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.118	118	0.100	0.116	116	2	70-125	25	
Toluene	<0.00100	0.100	0.120	120	0.100	0.120	120	0	70-125	25	
Ethylbenzene	<0.000700	0.100	0.119	119	0.100	0.118	118	1	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.234	117	0.200	0.235	118	0	70-131	25	
o-Xylene	<0.000700	0.100	0.119	119	0.100	0.119	119	0	71-133	25	

Analyst: MKO **Date Prepared:** 05/29/2013 **Date Analyzed:** 05/30/2013

Lab Batch ID: 914984 **Sample:** 638829-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.00756	1.00	0.961	96	1.00	0.963	96	0	80-120	20	
Chromium	<0.00355	1.00	0.971	97	1.00	0.972	97	0	80-120	20	
Iron	0.0248	5.00	4.57	91	5.00	4.59	92	0	80-120	20	
Manganese	<0.00291	1.00	0.936	94	1.00	0.949	95	1	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463584 **Project ID:** 073018

Analyst: AMB **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914529 **Sample:** 638612-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.5	102	25.0	25.4	102	0	80-120	20	

Analyst: AMB **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/23/2013

Lab Batch ID: 914766 **Sample:** 638787-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0280	25.0	25.5	102	25.0	25.7	103	1	80-120	20	

Analyst: DYV **Date Prepared:** 05/24/2013 **Date Analyzed:** 05/28/2013

Lab Batch ID: 914800 **Sample:** 638739-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	116	116	100	114	114	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	123	123	100	123	123	0	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: North Eunice

Work Order #: 463584 **Project ID:** 073018

Analyst: DYV **Date Prepared:** 05/24/2013 **Date Analyzed:** 05/29/2013

Lab Batch ID: 914808 **Sample:** 638742-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	117	117	100	119	119	2	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	128	128	100	129	129	1	70-135	25	

Analyst: DYV **Date Prepared:** 05/30/2013 **Date Analyzed:** 05/30/2013

Lab Batch ID: 915030 **Sample:** 638952-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	111	111	100	102	102	8	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	116	116	100	108	108	7	70-135	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463584

Lab Batch #: 914529 **Project ID:** 073018

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** AMB

QC- Sample ID: 463529-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	3700	1250	4960	101	80-120	

Lab Batch #: 914529

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** AMB

QC- Sample ID: 463584-003 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1130	500	1630	100	80-120	

Lab Batch #: 914766

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** AMB

QC- Sample ID: 463472-009 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	224	250	487	105	80-120	

Lab Batch #: 914766

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** AMB

QC- Sample ID: 463584-013 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	88.5	125	216	102	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: North Eunice

Work Order #: 463584

Lab Batch #: 914800 **Project ID:** 073018

Date Analyzed: 05/29/2013 **Date Prepared:** 05/24/2013 **Analyst:** DYV

QC- Sample ID: 463584-002 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	117	117	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	125	125	70-135	

Lab Batch #: 914808

Date Analyzed: 05/29/2013 **Date Prepared:** 05/24/2013 **Analyst:** DYV

QC- Sample ID: 463584-012 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	114	114	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	123	123	70-135	

Lab Batch #: 915030

Date Analyzed: 05/30/2013 **Date Prepared:** 05/30/2013 **Analyst:** DYV

QC- Sample ID: 463662-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<0.988	100	98.1	98	70-135	
C12-C28 Diesel Range Hydrocarbons	<0.988	100	107	107	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463584 **Project ID:** 073018

Lab Batch ID: 914531 **QC- Sample ID:** 463584-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.111	111	0.100	0.105	105	6	70-125	25	
Toluene	<0.00100	0.100	0.111	111	0.100	0.112	112	1	70-125	25	
Ethylbenzene	<0.000700	0.100	0.116	116	0.100	0.119	119	3	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.224	112	0.200	0.221	111	1	70-131	25	
o-Xylene	<0.000700	0.100	0.111	111	0.100	0.106	106	5	71-133	25	

Lab Batch ID: 914534 **QC- Sample ID:** 463662-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.117	117	0.100	0.101	101	15	70-125	25	
Toluene	<0.00100	0.100	0.114	114	0.100	0.103	103	10	70-125	25	
Ethylbenzene	<0.000700	0.100	0.115	115	0.100	0.113	113	2	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.238	119	0.200	0.209	105	13	70-131	25	
o-Xylene	<0.000700	0.100	0.114	114	0.100	0.103	103	10	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463584 **Project ID:** 073018

Lab Batch ID: 914538 **QC- Sample ID:** 463584-005 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/23/2013 **Date Prepared:** 05/22/2013 **Analyst:** DYV

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000500	0.100	0.0896	90	0.100	0.0869	87	3	70-125	25	
Toluene	<0.00100	0.100	0.0960	96	0.100	0.0884	88	8	70-125	25	
Ethylbenzene	<0.000700	0.100	0.106	106	0.100	0.0992	99	7	71-129	25	
m,p-Xylenes	<0.00140	0.200	0.197	99	0.200	0.182	91	8	70-131	25	
o-Xylene	<0.000700	0.100	0.0986	99	0.100	0.0975	98	1	71-133	25	

Lab Batch ID: 914807 **QC- Sample ID:** 463584-002 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	0.0168	0.250	0.264	99	0.250	0.265	99	0	80-120	20	

Lab Batch ID: 914820 **QC- Sample ID:** 463584-013 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/22/2013 **Date Prepared:** 05/22/2013 **Analyst:** WRU

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexavalent Chromium	<0.00500	0.250	0.231	92	0.250	0.230	92	0	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: North Eunice

Work Order # : 463584 **Project ID:** 073018

Lab Batch ID: 914984 **QC- Sample ID:** 463826-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/30/2013 **Date Prepared:** 05/29/2013 **Analyst:** MKO

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals per ICP by SW846 6010B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.0378	5.00	5.17	103	5.00	5.19	104	0	75-125	20	
Chromium	<0.0177	5.00	4.92	98	5.00	4.91	98	0	75-125	20	
Iron	<0.0939	25.0	23.6	94	25.0	23.5	94	0	75-125	20	
Manganese	1.37	5.00	6.22	97	5.00	6.22	97	0	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: North Eunice

Work Order #: 463584

Lab Batch #: 914996 **Project ID:** 073018

Date Analyzed: 05/28/2013 11:00 **Date Prepared:** 05/28/2013 **Analyst:** AMB

QC- Sample ID: 463584-008 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	3500	3720	6	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga Rovers & Associates

Date/ Time Received: 05/22/2013 10:00:00 AM

Work Order #: 463584

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6 *Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Sample instructions complete on Chain of Custody?	**Yes**	
#9 Any missing/extra samples?	**No**	
#10 Chain of Custody signed when relinquished/ received?	**Yes**	
#11 Chain of Custody agrees with sample label(s)?	**Yes**	
#12 Container label(s) legible and intact?	**Yes**	
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#14 Samples in proper container/ bottle?	**Yes**	
#15 Samples properly preserved?	**Yes**	
#16 Sample container(s) intact?	**Yes**	
#17 Sufficient sample amount for indicated test(s)?	**Yes**	
#18 All samples received within hold time?	**Yes**	
#19 Subcontract of sample(s)?	**Yes**	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/22/2013

Checklist reviewed by: Kelsey Brooks Date: 05/22/2013

Analytical Report 463662

for

Conestoga Rovers & Associates

Project Manager: Mike Wisniowiecki

North Eunice

073018

05-JUN-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

05-JUN-13

Project Manager: **Mike Wisniowiecki**
Conestoga Rovers & Associates
2135 S Loop 250 W
Midland, TX 79703

Reference: XENCO Report No(s): **463662**
North Eunice
Project Address: New Mexico

Mike Wisniowiecki:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463662. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463662 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 463662

Conestoga Rovers & Associates, Midland, TX

North Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DUP6 052213	W	05-22-13 00:00		463662-001
MW42A 052213	W	05-22-13 10:10		463662-002
MW35 052213	W	05-22-13 11:30		463662-003
RW003 052213	W	05-22-13 10:35		463662-004
IW002 052213	W	05-22-13 11:20		463662-005
MW46A 052213	W	05-22-13 12:45		463662-006
MW45 052213	W	05-22-13 14:00		463662-007
MW36 052213	W	05-22-13 15:05		463662-008
Woodell WW 052213	W	05-22-13 16:40		463662-009
MW5 052213	W	05-22-13 17:40		463662-010
TRIP BLANK	W	05-22-13 00:00		463662-011

CASE NARRATIVE

Client Name: Conestoga Rovers & Associates
Project Name: North Eunice

Project ID:	*073018*	Report Date:	*05-JUN-13*
Work Order Number(s):	*463662*	Date Received:	*05/23/2013*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None